

BMJ Open Making the most of existing research: an evidence gap map of the effects of food systems interventions in low-income and middle-income countries

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ABSTRACT

Objective Identify and describe the available evidence on the effects food systems interventions on food security and nutrition outcomes in low-income and middle-income countries.

Methods An adapted version of the high-level panel of experts food systems framework defined the interventions and outcomes included studies. Included study designs were experimental and quasi-experimental quantitative impact evaluations and systematic reviews. Following standards for evidence gap maps developed by 3ie, a systematic search of 17 academic databases and 31 sector-specific repositories in May 2020 identified articles for inclusion. Trained consultants screened titles/abstracts, then full texts of identified articles. Studies meeting eligibility criteria had meta-data systematically extracted and were descriptively analysed. Systematic reviews were critically appraised.

Results The map includes 1838 impact evaluations and 178 systematic reviews. The most common interventions, with over 100 impact evaluations and 20 systematic reviews each, were: provision of supplements, fortification, nutrition classes, direct provision of foods and peer support/counselling. Few studies addressed national-level interventions or women's empowerment. The most common final outcomes were: anthropometry, micronutrient status, and diet quality and adequacy. Intermediate outcomes were less studied.

Most evaluations were conducted in sub-Saharan Africa (33%) or South Asia (20%). Many studies occurred in lower-middle-income countries (43%); few (7%) were in fragile countries. Among studies in a specific age group, infants were most frequently included (19%); 14% of these also considered mothers.

Few evaluations considered qualitative or cost analysis; 75% used randomisation as the main identification strategy.

Discussion The uneven distribution of research means that some interventions have established impacts while other interventions, often affecting large populations, are underevaluated. Areas for future research include the evaluation of national level policies, evaluation of efforts to support women's empowerment within the food system, and the synthesis of dietary quality. Quasi-experimental approaches should be adopted to evaluate difficult to randomise interventions.

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ Broad scope including intermediate outcomes.
- ⇒ Protocol developed and implemented in a 9-month period drawing on latest advances in synthesis project management.
- ⇒ Not able to carry out forward citation checking due to high volume of included studies.
- ⇒ Only included studies published in English; however, research has found that synthesis results are not affected when the effect sizes from non-English studies are removed from the analysis.³⁰

INTRODUCTION

The triple burden of malnutrition refers to the concurrent presence of micronutrient deficiency, insufficient energy intake (ie, underweight) and excessive energy intake (ie, overweight and obesity) in a population.¹ Between 720 and 811 million people experience hunger and 2.37 billion lack key vitamins and minerals in their diets.² Furthermore, worldwide obesity nearly tripled between 1975 and 2014 with over 1.9 billion adults classed as overweight in 2016, of whom 650 million were obese.^{3,4} The prevalence of the triple burden of malnutrition is highest in low-income and middle-income countries (L&MICs), and especially, in fragile and conflict affected countries.⁵

The realities and challenges of the triple burden of malnutrition refocused the international community on food systems. Governments are expanding nutrition targets and increasing spending on nutrition-sensitive interventions, as these have the potential to simultaneously address multiple forms of malnutrition.⁵ The number of interventions implemented and evaluations of these interventions increased substantially in recent years.^{6–8}

As a result, there is an extensive, heterogeneous and rapidly growing body of literature evaluating the effects of food systems interventions on food security and nutrition in L&MICs. There have been several efforts to synthesise portions of this literature to support evidence-informed decision making. Most of the empirical focus has been on nutrition-sensitive agriculture^{6 9–11}; although, there is growing research on food policy and food systems in general,^{12–14} and development of methods used to study these complex relationships.^{5 15 16} However, there is a need for a broad, comprehensive overview of the evidence on all types of food systems interventions and their impacts on nutrition and food security.

The evidence gap map (EGM) presented here provides an overview of the existing literature and identifies evidence gaps to address the need for such a comprehensive overview. EGMs have the twin objectives of making existing evidence more easily available and informing strategic approaches to address extant evidence gaps.^{17 18} Such work assists stakeholders in identifying high-quality evidence and key areas for future research investments. This paper describes the methods and results of the mapping exercise and presents the results related to the distribution of the evidence base. 3ie's interactive online platform displays the final EGM.¹⁹ It uses a matrix format to reflect the distribution of evidence relating interventions within the food system (y-axis) to food security and nutrition outcomes (x-axis).

METHODS

We followed standards and methods established by 3ie in this EGM.^{17 18} In doing so, we used a systematic approach to identify, describe and map existing impact evaluations (IEs) and systematic reviews (SRs) assessing food systems interventions to improve food security and nutrition outcomes in L&MICs. The EGM was not registered, but the protocol was published on 3ie's Development Evidence Portal.¹⁹

Defining the intervention-outcome framework

Interventions:

We adapted the high-level panel of experts (HLPE) framework from 201²⁰ (extended by the International Food Policy Research Institute (IFPRI)²¹) to define the food system and categorise relevant interventions. The framework includes three domains: the food supply chain, the food environment and consumer behaviour (online supplemental appendix A). They reflect groups of actions and interventions, not a sequential flow of activities leading to one another.

The primary difference between the HLPE/IFPRI framework and our adaptation is that each intervention was assigned to only one domain to facilitate categorisation and maintain visual clarity (figure 1). Each domain was disaggregated into specific intervention groups (table 1). The HLPE/IFPRI framework outlines four activities within the food supply chain: production,

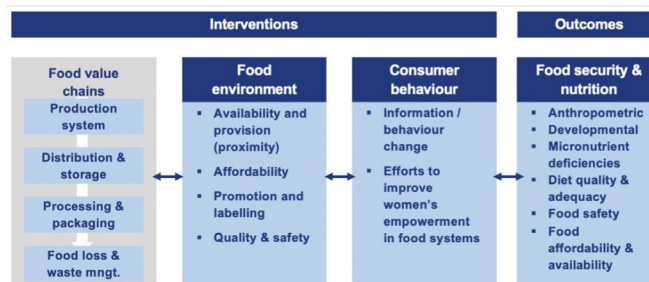


Figure 1 EGM framework, adapted from the HLPE/IFPRI framework. EGM, evidence gap map; HLPE, high-level panel of experts; IFPRI, International Food Policy Research Institute.

storage and distribution, processing and packaging, and food loss and waste management. The food environment domain includes interventions that engage with the physical, economic, political and sociocultural surroundings, opportunities and conditions that create, prompt and shape dietary preferences and choices and nutritional status.^{21–23} Finally, consumer behaviour interventions focus on individual preferences related to consumption, food prices and income available for food.^{21 22} The HLPE/IFPRI framework outlines five main drivers of change in (global) food systems: biophysical and environmental; innovation, technology and infrastructure; political and economic; sociocultural and demographics.^{20 21} These drivers are often exogenous factors in our interventions of interest and are excluded from the scope of this EGM.

Outcomes:

All measures of food security and nutrition were included as final outcomes. Intermediate outcomes, measuring steps along the theory of change such as income changes or food loss, were also included (table 2).

Study inclusion criteria

We included studies in L&MICs defined by the World Bank classification during the year of publication. Studies in populations with specific health conditions, such as HIV, anaemia or severe malnutrition, were excluded as the nutritional needs of these populations are unique. Included interventions and outcomes are defined above. Included study designs were quasi-experimental or experimental IEs and SRs of studies employing these methods (online supplemental appendix B). Only studies published in or after year 2000 and English language were included. Both ongoing and completed studies were included.

Search strategy

We systematically searched for English-language reports in 17 academic bibliographic databases in May 2020: MEDLINE, EMBASE, EconLit, Oxfam Policy, Repec, World Bank eLibrary, Cochrane Library, Agris, CINAHL, CAB Global Health, CAB Abstracts, Agricola, PsycINFO, Africa-Wide Information, Academic Search Complete, Scopus and WHO Global Index Medicus. See online supplemental appendix C for full search strings. We used

Table 1 Interventions included in the EGM framework

Domain	Intervention category	Intervention
Food supply chain	Production system	Provision of improved water access and management systems
		Provision of free or reduced-cost access to improved seed varieties
		Provision of free or reduced-cost access to fertiliser
		Provision of free or reduced-cost access to pesticides/herbicides
		Provision of free or reduced-cost access to livestock
		Provision of free or reduced-cost access to other/unspecified agricultural inputs
		Provision of mechanical equipment
		Education/information—farmer field schools
		Education/information—agricultural extension programmes
		Education/information—information guidance
		Education/information—other educational programmes
		Other efforts to improve the production system—insurance
		Other efforts to improve the production system—contract farming
		Other efforts to improve the production system—market support
		Other efforts to improve the production system—land markets and management
	Other efforts to improve the production system—agricultural credit/savings	
	Other efforts to improve the production system—other	
	Distribution and storage	Support for creating storage structure at farms
		Trade regulations
		Implementation of distribution centres
		Improved transportation from farms to markets
		Education regarding improved storage and distribution techniques
		Cold chain initiatives
	Processing and packaging	Fortification
		Packaging
		On farm, postharvest processing
		Provision of good or services to support food processes of business models
Education regarding improved processing and packaging techniques		
Food loss and waste management	Private food donation	
	Use of and education regarding the use of spoiled, near spoiled, or traditionally uneaten food	
	Composting	
Food environment	Availability	Designations of space and zoning laws
		Direct provision of foods
		Provision or use of supplements
	Affordability	Cash-for-food programmes
		Governmental price manipulations (excluding tariffs)
	Promotion and labelling	Advertising regulations
		Innovative store design
		Labelling regulations
	Quality and safety	Food safety regulations

Continued

**Table 1** Continued

Domain	Intervention category	Intervention
Consumer behaviour	Efforts to increase women's decision-making power	Efforts to increase women's decision-making power
	Information/behaviour change communication	Peer support/counsellors
		Professional services (dietitians/ nurses)
		Community meetings
	Classes	
Healthy food social marketing campaigns	Healthy food social marketing campaigns	
Information/behaviour change communication	Door-to-door campaigns	

EGM, Evidence Gap Map.

terms for relevant interventions, study designs and publication year. To identify studies taking place in L&MICs, we applied the Cochrane Effective Practice and Organisation of Care Group 'LMIC Filters' 2020.

We completed a grey literature search of 31 sector specific databases and websites using basic search strings tailored to each database or website (online supplemental appendix C). We cross-checked all citations from included SRs for inclusion. We requested additional relevant literature from the advisory and policy stakeholder groups and through a blog post on the 3ie website that was promoted using social media; any studies identified before the end of September 2020 were also included.

Screening and data extraction procedure

After we removed duplicates, the research team screened titles and abstracts, followed by eligible full text reports, according to predefined criteria. Single screening with a safety-first approach was carried out; if the first reviewer was uncertain, she marked it for a second review.²⁴ Periodic meetings were held to discuss and resolve screening decisions for studies marked for a second opinion, for boundary decision examples, see online supplemental appendix D. Full-text reports were single screened using the safety-first approach (70%), with 30% double screening. The EPPI-Reviewer V.4 software's machine learning streamlined the process and efficiently removed clearly irrelevant studies.

All articles on the same intervention and population were linked to avoid over-representing interventions with multiple reports. For example, reports were linked when authors followed a group of participants over time, published multiple versions of the same study in different formats or updated an SR. Descriptive information was only included once for each group of linked publications. Therefore, the presented analysis is reported at the study level, rather than the publication level. However, if there was additional relevant data, such as outcomes, in the linked publications this was added to the record for the main study.

One person systematically extracted data and another person verified the data using a prespecified data extraction tool (online supplemental appendix E). General study characteristics, such as authors, publication date, study location, intervention type, outcomes reported and definition of outcome measures, population of interest and funders, were extracted. Methodological information, including the type of quantitative methods employed and whether any cost or cost-benefit analysis was conducted, was also extracted.

We critically appraised all included SRs using a standardised appraisal tool (online supplemental appendix F). We considered each review's search strategy, screening method, risk of bias assessment, data extraction and synthesis methods. SRs were rated as low, medium or high confidence, based on guidance provided in Snijlsvit and colleagues.¹⁷ To ensure consistency in the quality appraisal process, a 5% sample of reviews was initially appraised by two researchers, then independently reconciled by an SR expert. Reviewers were provided with feedback. Subsequently, one person appraised each SR, and the SR expert independently reviewed all completed appraisals. IEs were not critically appraised due to timescale and resources.¹⁷

Developing the interactive EGM

All included studies are presented in an interactive graphic on 3ie's EGM platform.¹⁹ This matrix presents the food systems interventions as rows and the food security and nutrition outcomes as columns. Within the matrix, grey circles represent IEs. Coloured circles represent SRs. The SRs follow a traffic-light system to indicate confidence in their findings: green for high confidence, orange for medium, red for low. Blue circles are ongoing studies. The size of the bubble indicates the relative size of the evidence base for that intervention-outcome combination. The interactive aspect of the EGM allows users to filter the results based on key characteristics, such as study design, intervention country and age of the

Table 2 Outcomes in the EGM framework

Stage of theory of change	Outcome group	Outcome sub-group
Intermediate	Economic	Income
		Assets
		Output value
		Prices received for goods
		Other SES indicators
		Tax revenue
		Purchasing behaviour
	Agricultural	Water related
		Animal husbandry
		Plant/crop production
		Land related
		Quality of agricultural inputs
		Agricultural cooperatives
	Nutritional outcomes	Food nutrient content
		Caloric requirements
		Nutrient bioavailability
	Advertising and labelling	Exposure to advertisement
		Advertisement topics
		Accuracy of advertisement
	Food distribution	Import/export
		Movement of food
		Location of foods in stores
		Food distribution centres
	Environmental impacts of the food system	Climate impact
		Non-food waste produced
	Food loss	Time food remains unspoiled
		Food spoilage
		Food loss
	Intrinsic motivators	Consumer preferences
		Perceptions
		Knowledge
	Women's empowerment	Decision making
		Ownership
		Control of resources
		Self-esteem
		Time use
		Other women's empowerment outcome
	Regulations	Violations
		Fines
		Other regulation outcome
	Economic, social, and political stability	Economic, social, and political stability
Time use	Time use	
Behaviour change	Behaviour change	
Other steps taken due to non-compliance	Other steps taken due to non-compliance	

Continued

**Table 2** Continued

Stage of theory of change	Outcome group	Outcome sub-group
Final	Anthropometric	Linear growth
		Weight
		Relative weight
		MUAC
		Birth outcomes
		Anthropometric other
	Developmental outcomes	Physical
		Other developmental outcomes
	Micronutrient status	Iron
		Iodine
		Vitamin A
		Zinc
		Other micronutrient status outcome
	Diet quality and adequacy	Breast feeding
		Dietary diversity
		Insufficient diet
		Micronutrient intake
		Other diet quality and adequacy
	Food safety	Food toxins
		Food borne illness
		Other food safety outcome
	Food affordability and availability	Food access
		Food availability and supply
		Affordability
		Food insecurity measures
		Food stressed households

EGM, evidence gap map; MUAC, mid-upper arm circumference; SES, socioeconomic status.

participants, thereby facilitating efficient, user-friendly identification of relevant evidence.

RESULTS

We identified 142 849 articles through the academic database search; we found an additional 1590 through the grey literature search (figure 2). Studies with high similarity that potentially could be duplicates were identified by EPPI Reviewer software. Identical studies were automatically assigned as duplicates and the rest of the studies were manually compared by consultants. After removing duplicates, 111 641 studies were screened using title and abstract, and 10 323 screened using full text. Finally, 2477 papers were included, which correspond to 2016 unique studies (1838 IEs and 178 SRs) (online supplemental appendix G).

The results show a significant growth in literature over time (figure 3). In 2000, there were 17 IEs and 0 SRs, while in 2020 there were a total of 1838 IEs and 178 SRs. Growth in the literature base was especially high for IEs

of food supply chain and consumer behaviour interventions. Half of the IEs were published between 2015 and 2019.

Characteristics of the evidence base

Interventions

There was an uneven distribution in the frequency with which interventions were evaluated. Certain nutrition-specific interventions were evaluated in over 100 IEs and 20 SRs: provision of supplements (SR 67; IE 369), fortification (SR 23; IE 245), direct provision of foods (SR 24; IE 205) and peer support and counselling in the consumer behaviour domain (SR 22; IE 130; figure 4).

Although at least one IE was identified for most of the interventions in the framework, we did not identify any IEs of interventions related to advertising regulations, food waste education or the packaging of food. Several intervention types had fewer than five evaluation studies: food safety regulations (1), cold chain initiatives (1), composting education (3), labelling regulations (3), door-to-door behaviour change communication campaigns

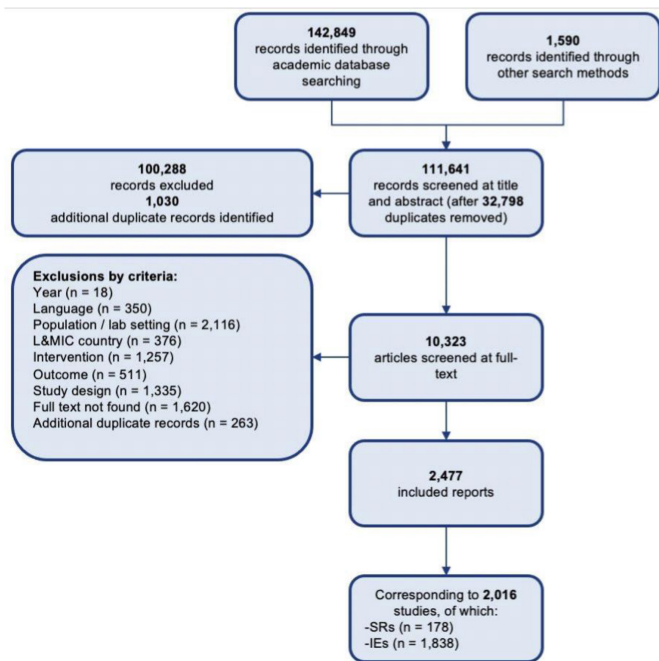


Figure 2 PRISMA diagram. IEs, impact evaluations; L&MIC, low-income and middle-income country; PRISMA, Preferred Reporting Items for Systematic Reviews and Meta-Analyses; SRs, systematic reviews.

(4), provision of goods and/or services to support food processing (4), on-farm and post-harvest processing (4); and access to pesticides (4).

Many interventions were associated with multiple IEs but only one or no SRs: agricultural extension (SR, 1; IE, 112), provision of free or reduced cost access to other/unspecified agricultural inputs (SR, 1; IE, 65), agricultural information provision (SR, 0; IE, 27), government manipulations of price (SR, 1; IE, 22) and agricultural insurance (SR, 1; IE, 22).

Some evaluations considered programmes with multiple components that spanned the interventions in the framework. Common groupings of interventions that were implemented and evaluated jointly in at least five IEs included: fortification and the direct provision of food, nutrition classes and healthy food marketing campaigns, and peer support and nutrition classes. In addition, 11 IEs considered multicomponent programmes with

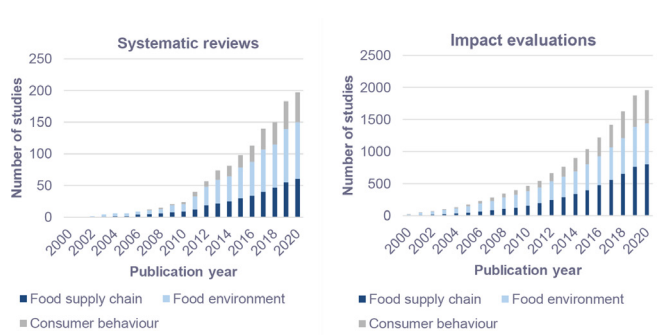


Figure 3 The cumulative distribution of included studies by year reflects a rapid growth in the literature base.

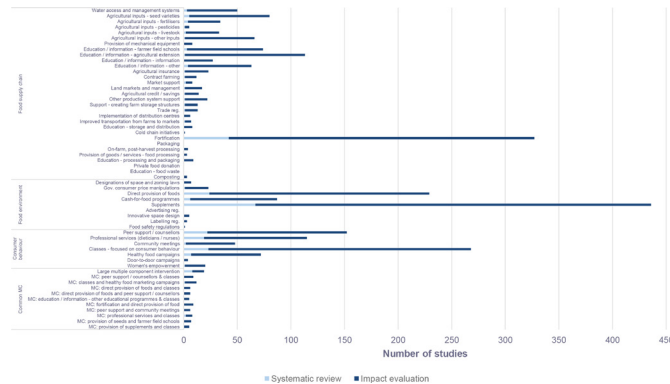


Figure 4 There is considerable heterogeneity in the frequency with which interventions are evaluated.

activities that fell into five or more interventions. Most of these included at least one food supply chain intervention. Eight SRs considered interventions that fell into five or more categories. Evaluations of common intervention packages are represented in the corresponding intervention package (eg, fortification and direct provision of food) while less common intervention packages are represented alongside each intervention component they implemented.

Outcomes

Almost three-quarters of studies evaluated at least one final outcome (SR 170; IE 1,353; figure 5). The most common final outcomes were anthropometry (SR 111; IE 671), micronutrient status (SR 78; IE 530) and diet quality and adequacy (SR 51; IE 555). The specific final outcomes that were most commonly examined in IEs were linear growth (433), weight (395) and relative weight (377).

Less than half of all included studies evaluated at least one intermediate outcome (SR 38; IE 848). The most common intermediate outcome categories were economic (SR 18; IE 350), agricultural (SR 13; IE 309) and intrinsic motivational outcomes (SR 16; IE 302). The specific intermediate outcomes that were most commonly examined were behaviour change (269), knowledge (238), income (225) and plant production (222).

The location of foods in stores, climate impact, non-food waste produced, import/export, agricultural cooperative performance, women's self-esteem, food spoilage

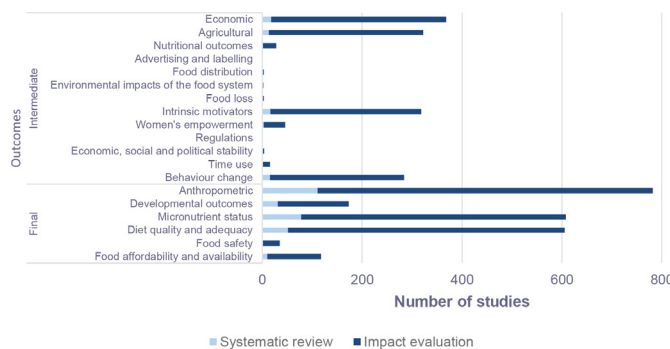


Figure 5 Research focuses on final outcomes without considering evidence along the theory of change.

or loss and economic, social and political stability were each considered in fewer than five studies.

Intervention-outcome combinations

The most common interventions (fortification, supplementation, the direct provision of food and nutrition classes) tended to be evaluated against iron status and various anthropometrics. Evaluations of the impacts of fortification considered iron status (170), linear growth (118), weight (100) and relative weight (78). Evaluations of supplementation programmes considered iron status (150), linear growth (125), weight (117) and relative weight (88). Evaluations of the direct provision of food also measured linear growth (81) and weight (74). While the evaluations of nutrition classes followed a similar pattern in outcome measurement as the others, they also tended to evaluate impacts on knowledge (91).

Other characteristics

IEs were primarily located in Sub-Saharan Africa (648), South Asia (367) and East Asia and the Pacific (324). IEs have been conducted in 25 (out of 36) fragile and conflict affected countries, as defined by the World Bank: mostly in sub-Saharan Africa (87) and the Middle East and North Africa (15).²⁵

IEs mostly included both sexes and populations with a wide age range; however, few considered those over 60 years old (59). The most commonly isolated age group was infants (497). Among studies evaluating infant outcomes, 14% (70) also looked at outcomes for mothers. About 25% (405) of included studies focused on women of reproductive age, most commonly pregnant women (214), postpartum (86) and lactating women (68). Over half of the interventions were conducted in rural areas. Most interventions were implemented locally (1401). Only 175 interventions were conducted and evaluated at the national or transnational level. The most common intervention setting was in the household (627). Over 1300 of the included studies did not specify the programme funding agency type or name.

About three-quarters of the IEs were randomised controlled trials (RCTs) (1390). Quasi-experimental studies mainly used statistical matching (242) and difference-in-differences (136). Just over 10% of the IEs adopted mixed methods approaches (186). There were 173 IEs that reported cost data or presented cost analysis in some form; 103 of these presented detailed budget information or attempted to make some comparison between the costs of a programme and the associated benefits.

In total, 95 of the reviews were appraised as low confidence, 46 were rated medium confidence and 34 were rated high confidence. The high confidence SRs were mostly published more recently, with 75% published in or after 2015 (26), compared with 60% of low and medium quality reviews published in or after 2015. Reviews rated with high confidence predominantly focused on synthesising the effects of the provision or use of supplements

on birth outcomes (10), iron or anaemia status (7) and the effect of fortification on iron status (6).

DISCUSSION

There is significant variation in the intensity of research by intervention and outcome type, in addition to other characteristics of interest such as setting, population and research method. The most well-researched interventions are nutrition-specific and include fortification, supplementation, the direct provision of food and nutrition classes. These interventions easily lend themselves to experimental IE designs. Positive impacts are consistently observed in short times scales using easily quantified metrics. Key evidence gaps included the evaluation of national level policies and efforts to support women's empowerment.

However, not all evidence gaps must be filled in our framework. In some cases, there is no theoretical reason to expect a relationship between an intervention and an outcome. In others, relationships may already have been (dis)proven. In both instances, additional research is not needed. For example, an evaluation of the impacts of breastfeeding peer-support groups on environmental outcomes is not theoretically sound. While the re-evaluation of certain interventions in new contexts may be necessary for external validity,²⁶ additional evaluations of the impacts of established interventions, such as fortification and supplementation interventions, are not necessarily beneficial unless they consider unique context. The generalisable impacts of these interventions were established as far back as the 2013 Lancet series on Maternal and Child Nutrition.²⁷ However, the evaluation of intervention-outcome relationships that are theoretically sound and not well established represent valuable practical contributions to the adoption of evidence supported interventions and policies.

Interventions which are difficult to evaluate due to long time frames (eg, land markets and management interventions), inability to randomise (eg, trade regulations or a national food policy) and difficulty in outcome measurement (eg, efforts to increase women's decision making) are not often evaluated. As a result, multicomponent interventions, national policies and agricultural interventions are understudied. There has been a shift in the rhetoric surrounding the evaluation of these interventions in recent years, but this is not yet apparent in the literature base.²⁸ The field of economics has taken on the challenge of identifying causal impacts in difficult contexts and developed new approaches for the evaluation of policy. In 2019 and 2021, the Nobel Prize in economics was awarded to researchers who developed innovative approaches to evaluate these difficult to study interventions.²⁹ There have been recent advancements in measuring benefits that happen far down the causal chain,¹⁵ which could be useful in considering the impacts of agricultural interventions on final outcomes. The synthetic control method is becoming more widely

accepted and allows for the evaluation of national policies (eg, labelling regulations) and other interventions with only one treatment group (eg, designations of space and zoning).¹⁶ Other approaches, such as adaptive trials, factorial designs and qualitative comparative analysis, for evaluating complex interventions are also being widely adopted.³⁰ Mixed-methods approaches for evaluating complexity-informed interventions are now well established.³¹ Complexity-informed evaluation designs may be of particular interest to evaluators in the food system seeking to untangle the web of dependencies and driving forces that act on the complex system.

Opportunities for future research

Mixed-methods approaches and cost evidence are under-represented in the literature base and could provide valuable insights to the field. In both cases, the higher costs of these evaluations can prevent them from being implemented. Differences between qualitative and quantitative research approaches can make cohesive mixed-methods evaluations challenging. Many 'mixed-methods' evaluations more closely resemble two separate evaluations (one quantitative and one qualitative) than a single, cohesive evaluation where each component is integrated within and builds off the other. One potential explanation for the limited cost evidence is that it is not, and should not be, conducted for evaluations that show null results. In addition, economic analysis can be challenging for studies that have heterogeneous effects (eg, only work for the poorest participants) as it is difficult to determine how participant selection could affect future cost-effectiveness.

We have identified several widely implemented interventions that have not been well studied and, therefore, provide promising opportunities for future research. Taxes on sugar-sweetened beverages and labelling regulations for unhealthy foods have not been evaluated for their impacts on weight, yet more than 40 countries (many L&MICs) have implemented these interventions to fight the obesity epidemic.^{32 33} Mexico has successfully evaluated the impacts of their tax on some intermediate outcomes, implying that it is possible to conduct these evaluations, even if challenging.³⁴⁻⁴⁰ Many stakeholders are supporting post-harvest processing initiatives, but have not yet established how far down the causal chain these interventions provide impact. Evaluations of these interventions have the potential to impact policies that affect the lives of millions of people worldwide. As the reach and resource requirements of an intervention increase, so does the ethical imperative to evaluate it.

The 400 studies that used 'other dietary quality and adequacy' outcomes represent an exciting gap for evidence synthesis. Often, these outcomes were the intakes of specific foods or food groups. While providing a wealth of information, the variation in outcomes makes drawing conclusions across studies challenging. By developing novel synthesis methods, the evidence across these different metrics could be used in new ways, reaching new

conclusions and adding rich detail to existing work. There have been some recent efforts to collate the available methods for measuring diet, such as the INDDX Project's Data4Diets tool and IMMANA's Innovative Metrics, Tools and Methods Evidence Gap Map.^{41 42} However, tools for synthesising across metrics are not yet available.

Traditionally, women are significant actors within food systems; however, relatively few studies examined interventions supporting women's decision-making or measured outcomes regarding women's empowerment. The studies we identified typically viewed women as cooks and mothers rather than independent actors within the food system. One-quarter of studies focused on women of reproductive age, especially perinatal women. More interventions including women as independent actors within the food system could lead to promising new avenues to address Sustainable Development Goals 2 and 5 at the same time.

Implications for research and policy

This review of the evidence base highlights some ways that policy and research could be adopted to make the most of limited resources. Efforts need to move away from re-evaluating the impacts of established interventions, such as fortification, supplementation, the direct provision of food, and nutrition classes, to considering scaling and sustainability through process evaluation and implementation research. Now that these interventions are widely adopted,^{43 44} we must consider how to implement them effectively at population level and in diverse contexts. Future studies could provide new insights by incorporating process evaluations, mixed-methods approaches and cost evidence to understand the mechanisms through which changes may occur and how limited resources can be best allocated.

The adoption of standardised measures of diet quality and adequacy would aid comparison and improve evidence synthesis efforts. Policy-makers, implementers and researchers must continue working together to develop measures of diet that balance ease of use, linkage to disease and standardisation across context in order to allow for the effective comparison of results. A new diet quality questionnaire may represent a productive way to systematised diet data; however, due to its novelty, it is unclear as of yet if it will be adopted.⁴⁵ Although measures of dietary diversity are relatively common (150 studies in our map), these metrics do not always capture sufficient information for detailed nutritional analysis.⁴⁶ A recent synthesis of metrics found that among 19 common dietary metrics, most were not validated against health outcomes and none were designed to measure the double burden of malnutrition.⁴⁷

Decision-makers and practitioners are encouraged to use relevant existing high-quality SRs as identified through this mapping exercise. They may consider funding studies in under-researched areas and exercise caution and consideration prior to implementing under-researched interventions. However, because only IEs and SRs of



IEs were included in this EGM, policy-makers should strengthen any decisions made using this map with the following information sources:

- ▶ Existing or planned research and interventions by government agencies and development partners.
- ▶ Other forms of evidence, including implementation research, process evaluations, qualitative studies and programming administrative and monitoring information.
- ▶ Existing theories of change and logical frameworks.
- ▶ Formative work and local knowledge.

Strengths and limitations of research

There are several strengths and limitations of this research. Strengths include having a broad scope, considering a range of intermediate outcomes and reviewing a vast amount of the food security and nutrition intervention literature. The review protocol was developed and implemented in a 9-month period drawing on the latest advances in synthesis project management. Another strength is that this map was commissioned by a global health donor (GIZ), indicating a direct policy and planning need in the field.

Due to the high volume of included studies, forward citation checking was beyond the scope of this EGM. Only studies published in English were included; however, research has found that synthesis results are not affected when the effect sizes from non-English studies are removed from the analysis.⁴⁸ This decision was meant to limit scope, but some studies may be omitted.

EGM do not provide synthesis of the findings of IEs, rather they are intended to make these more easily available. Users of the map are expected to reference the included articles to make this judgement based on their unique interests and needs or use the EGM as a starting point for syntheses that do make these judgements.

CONCLUSION

Addressing the triple burden of malnutrition in a way that also considers the interactions of the food system with the ongoing climate crisis is one of the major challenges of our era. Increasing, but still limited, funding is dedicated to addressing this challenge it is important that decisions about policies and programmes are informed by the best available evidence. This EGM highlights a significant and growing evidence base on food systems and nutrition that could and should be used to support effective strategies. Decision makers and practitioners can use the EGM to access existing evidence on interventions. Commissioners of research and researchers themselves can use the EGM findings to prioritise the funding and conduct of new research

The findings show that there is a substantial imbalance in evidence on this topic, with interventions that lend themselves to RCTs being studied more frequently than interventions that cannot be randomised or take a long time to realise results. Researchers and policy-makers may

consider the evaluation of national, widely implemented interventions with limited evidence and studies focusing on women as decision-makers. Future research should also assess the examine the intermediate steps in a theory of change.

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Correction: *Making the most of existing research: an evidence gap map of the effects of food systems interventions in low-income and middle-income countries*

Storhaug IG, Lane C, Moore N, *et al.* Making the most of existing research: an evidence gap map of the effects of food systems interventions in low-income and middleincome countries. *BMJ Open* 2022;12:e055062. doi:10.1136/bmjopen-2021-055062

This article has been corrected since it was published online. Two authors (Amber Franich and Heike Rolker) have been added to the paper.

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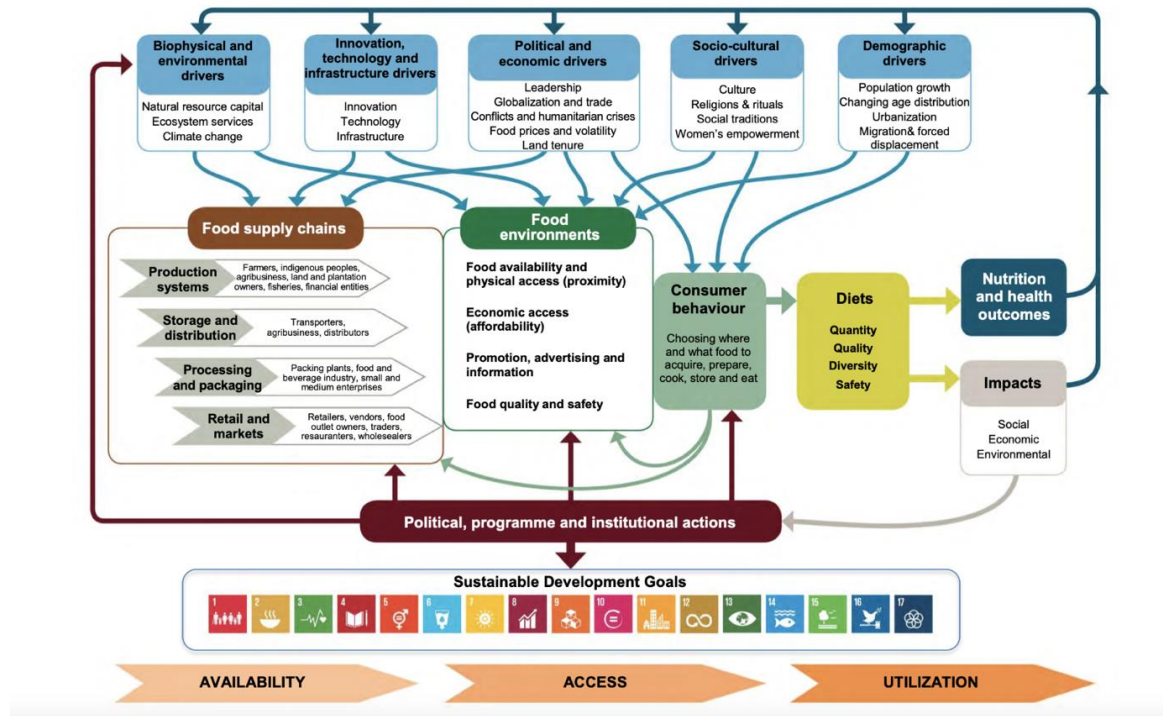
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Appendix A: HLPE framework¹

Figure 1 Conceptual framework of food systems for diets and nutrition



Appendix B: Study design and comparator

We included impact evaluations where the comparison/control group receive no intervention, a different food system intervention, a placebo intervention or the study employs a pipeline (wait-list) approach.

We included both impact evaluations and systematic reviews:

- **Impact evaluation:** An impact evaluation is a study that uses rigorous methods to provide a quantitative estimate of the impact of an intervention. This is accomplished by constructing a counterfactual, which provides evidence about what would have happened in the absence of the intervention. In an impact evaluation, the outcomes of those who receive the intervention are compared with those of a comparison group that does not receive the intervention. The comparison group may be a specific population in the study area that does not receive the treatment (as in an RCT), or may be constructed by researchers (as in propensity score matching or interrupted time series). For an impact evaluation to be valid, there must be a sound statistical basis for claiming that the comparison group represents what would have happened to the treatment group had they not received the intervention.
- **Systematic review:** A systematic review is a synthesis of the research evidence on a particular topic, such as the effectiveness of water supply and sanitation, obtained through an exhaustive systematic literature search for all relevant studies using widely accepted scientific strategies to minimize error associated with appraising the design and results of studies. A systematic review uses methods of internal and external quality assurance that make it more similar to a primary study (e.g. double-coding of data, calculation of effect sizes from data reported, synthesis of finding).

We only included studies that implemented at least one of the following study designs that are widely used to evaluate intervention effectiveness^{2,3}:

- A) Prospective studies that allocate participants to and control groups using randomised or quasi-randomised mechanisms at individual or cluster levels:
 1. Randomised control trial (RCT) with assignment at the individual or cluster level.
 2. Quasi-RCT using a quasi-random method of prospective assignment (e.g. alternation of clusters)
- B) Non-randomised designs with either a known assignment variable(s) or a seemingly random assignment process:
 3. Regression discontinuity designs, where assignment is done on a threshold measured before intervention, and the study uses prospective or retrospective approaches of analysis to control for unobservable confounding.
 4. Natural experiments with clearly defined intervention and comparison groups, which exploit apparently random natural variation in assignment (e.g. lottery) or random errors in implementation, etc.
- C) Non-randomised studies with pre-intervention and post-intervention outcome data:
 5. Panel studies or pseudo-panels with analysis to account for time-invariant unobservables (e.g. difference-in-difference, DID, or fixed-effects models)

6. Cross-sectional or panel (controlled before and after) studies with an intervention and comparison group using methods to match individuals and groups statistically (e.g. PSM) or control for observable confounding in adjusted regression.
 7. Interrupted time series (ITS)
- C) Other non-randomised designs:
8. Studies that build a counterfactual through synthetic control approaches.
 9. Cross-sectional studies using multi-stage or multivariate approaches to account for unobservables, including instrumental variable (IV) approaches such as two- or three-stage least squares procedures, or Heckman two-step estimation approaches
- D) Systematic effectiveness reviews were included if they described the search, data collection and synthesis methods according to the 3ie database of systematic reviews protocols⁴. Any evidence reviews, such as literature reviews, that did not adopt these methods was excluded. We excluded systematic reviews that were not effectiveness reviews (i.e. those which do not aim to synthesise the evidence of the effects of a relevant intervention on priority outcomes of interest), such as systematic reviews of driving factors of nutrition sensitive methods. Where reviews included a mixture of evidence from both high-income and LMICs, we included them if they presented disaggregated evidence for LMICs, or if more than 50 per cent of the evidence of non-disaggregated results were from LMICs. Where there were no disaggregated results for LMICs and more than 50 per cent of the evidence for consolidated findings in a systematic review came from high-income countries, or where it was impossible to ascertain the composition of evidence by income level, the studies were excluded. If reviews included multiple research methods, we included these if over at least 50 percent of studies include at least one impact evaluation design specified above.

We excluded before-after studies or cross-sectional studies that did not attempt to control for selection bias or confounding in anyway.

Case-control studies were also excluded.

Studies that present the results of randomised block designs, where the farm fields or field sections are the blocking unit only were excluded.

Studies that only examine willingness-to-pay for goods, services, process and business models were excluded.

Other criteria

We also applied the following criteria when selecting studies for inclusion.

- **Language:** Studies published in any language will be included, although the search terms used will be in English only.
- **Publication date:** Studies will be included if their publication date was 2000 or after to make the search results manageable for the study team to screen in the timeframe that was available.
- **Status of studies:** We will include ongoing and completed impact evaluations and systematic reviews. For on-going studies, we will include prospective study records, protocols and trial registries. Providing an indication of the prevalence and characteristics of on-going evaluation evidence is expected to enrich the analysis of current evidence gaps and support decision making in relation to evidence generation.

Appendix C: Full search strategy

C1. Search strategy for academic bibliographic databases

Academic Search Complete, Agris, Repec, World Bank e-Library, Oxfam Policy, Africa-Wide, Agricola, CAB abstract and CINAHL were searched simultaneously in Ebsco. CAB Global Health, EconLit, Embase, Medline and PsychInfo were searched simultaneously in Ovid. Scopus, Cochrane Library and WHO Global Index Medicus were searched directly in the database website.

Database searched	Number of records identified
Academic Search Complete, Agris, Repec, World Bank e-Library, Oxfam Policy	18711
Africa-Wide	4338
Agricola	1712
Cab Abstract	30369
CINAHL	4055
CAB Global Health	24575
EconLit	2465
Embase	1638
Medline	13314
PsychINFO	1943
Scopus	33233
Cochrane Library	4237
WHO Global Index Medicus	2047

CAB Abstracts (Ebsco) – Searched 27th May 2020

S16 S3 AND S4 AND S15 Limiters - Publication Year: 2000-2020

30,369

S15 S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14

Limiters - Publication Year: 2000-2020

353,753

S14 TI ((cook* or ((meal* or food*) N3 prepar*) or (wom?n N4 (food* or eat* or feed* or meal* or diet*) N4 (empower* or deci*)) or ((food* or eat* or feed* or breastfeed* or "breast feed*" or meal* or diet* or "F&V") N4 (inform* or educat* or promot* or campaign* or media or initiative* or (peer N1 (counsel* or support)) or (community N3 (meet* or class* or engag* or participat*)) or "door-to-door")))) OR SJ((cook* or ((meal* or food*) N3 prepar*) or (wom?n N4 (food* or eat* or feed* or meal* or diet*) N4 (empower* or deci*)) or ((food* or eat* or feed* or breastfeed* or "breast feed*" or meal* or diet* or "F&V") N4 (inform* or educat* or promot* or

campaign* or media or initiative* or (peer N1 (counsel* or support)) or (community N3 (meet* or class* or engag* or participat*)) or "door-to-door")))

34,568

S13 TI ((((food* N3 (safe* or quality)) N3 (regulat* or restrict* or polic* or law* or legislat* or inspect*)) or (food* N3 certif*))) OR SJ ((((food* N3 (safe* or quality)) N3 (regulat* or restrict* or polic* or law* or legislat* or inspect*)) or (food* N3 certif*)))

636

S12 TI ((((food* N4 ((advertis* or label* or market*)) N3 (ban* or restrict* or regulat* or polic* or law* or legislat*)) or ((supermarket or ((food* or grocer* or convenience or corner) N1 (store* or market*)) N4 (design* or redesign* or re-design* or layout* or innovat*)) or (front N3 pack* N3 label*))) OR SJ ((((food* N4 ((advertis* or label* or market*)) N3 (ban* or restrict* or regulat* or polic* or law* or legislat*)) or ((supermarket or ((food* or grocer* or convenience or corner) N1 (store* or market*)) N4 (design* or redesign* or re-design* or layout* or innovat*)) or (front N3 pack* N3 label*)))

427

S11 TI ((((food* or consumer*) N4 (subsid* or "price control*")) or (food* N4 (cash or "social assistance" or "social safety net" or voucher* or welfare)))) OR SJ((((food* or consumer*) N4 (subsid* or "price control*")) or (food* N4 (cash or "social assistance" or "social safety net" or voucher* or welfare))))

508

S10 TI (("food environment*" or (zoning and (food* N3 (security or access*))) or ((sugar* or SSB or "unhealthy food*") N3 tax*) or nudg* or ((food* or eat* or feed* or meal* or diet*) N4 (deci* or ((cultur* or social) N3 (norm* or preferen*)))) or "ration shop*" or "farmer* market*" or "food desert*" or ((food or grocer*) N3 retail* N3 (tax* or subsid* or incentiv*)) or (school* N4 (meal* or feed* or food* or lunch*))) OR SJ(("food environment*" or (zoning and (food* N3 (security or access*))) or ((sugar* or SSB or "unhealthy food*") N3 tax*) or nudg* or ((food* or eat* or feed* or meal* or diet*) N4 (deci* or ((cultur* or social) N3 (norm* or preferen*)))) or "ration shop*" or "farmer* market*" or "food desert*" or ((food or grocer*) N3 retail* N3 (tax* or subsid* or incentiv*)) or (school* N4 (meal* or feed* or food* or lunch*)))

5,653

S9 TI (((food N3 (loss* or wast*)) or ((food* or grocer* or soup) N4 (donat* or pantr* or bank* or kitchen* or transfer*)) or (food* N4 near* N4 spoil*))) OR SJ(((food N3 (loss* or wast*)) or ((food* or grocer* or soup) N4 (donat* or pantr* or bank* or kitchen* or transfer*)) or (food* N4 near* N4 spoil*)))

5,993

S8 TI ((((food* or crop* or staple*) N3 (fortif* or biofortif*)) or ((recycl* or compost* or biodegrad* or plastic*) N3 (pack* or sache*)) or (post-harvest N4 (clean* or winnow* or cann* or mill* or thresh* or hull*)) or ((food* or crop* or grain*) N3 dry*))) OR SJ((((food* or crop* or staple*) N3 (fortif* or biofortif*)) or ((recycl* or compost* or biodegrad* or plastic*) N3 (pack* or sache*)) or (post-harvest N4 (clean* or winnow* or cann* or mill* or thresh* or hull*)) or ((food* or crop* or grain*) N3 dry*)))

4,431

S7 TI ((((grain* or crop* or agricultur* or farm* or produce) N4 (silo* or stor* or shed* or warehous*)) or ((agricultur* or farm*) N3 (collection or distribution) N3 (centre* or center* or point* or hub*)) or ((farm* or produce or food* or agricultur*) N4 ("cold chain*" or ((refrigerat* or cold) N3 (truck* or transport* or transit)))) or ((import or imports or importation or export*) N4 (tariff* or quota* or ban* or restrict* or regulat*)) or "trade agreement*")) OR SJ((((grain* or crop* or agricultur* or farm* or produce) N4 (silo* or stor* or shed* or warehous*)) or ((agricultur* or farm*) N3

(collection or distribution) N3 (centre* or center* or point* or hub*) or ((farm* or produce or food* or agricultur*) N4 ("cold chain*" or ((refrigerat* or cold) N3 (truck* or transport* or transit)))) or ((import or imports or importation or export*) N4 (tariff* or quota* or ban* or restrict* or regulat*)) or "trade agreement*"))

7,170

S6 TI (((Food N3 (system or produc*) or (agricultur* N3 produc*) or aquacultur* or fisher* or livestock* or ((kitchen or home*) N3 (farm* or garden*)) or "nutrition-sensitive" or (improv* N3 (seed* or variet* or crop*)) or (genetic* N3 modif* N3 (food* or organism*)) or GMO* or ((compost* or manure* or mulch* or fertili* or pesticid* or insecticid*) N3 (appl* or spray* or spread* or use or usage)) or ((drought* or pest* or insect*) N3 (toleran* or resist*)) or (rotat* N3 crop*) or (land N3 manage*) or "fixed distance planting" or (plant* N3 (row or rows*)) or ((farm* or crop or agricultur*) N4 subsid*) or (price* N4 purchas* N4 guarantee*) or ((agricultur* or crop* or rain* or weather or index) N4 insurance) or (irrigat* N4 (project* or program* or access* or improv*)) or "water meter*" or (rain* N3 (fed or feed*)) or (trench* N3 hill*) or hilling or "contour bund*" or zai or "water break" or terrac* or ((farm* or agricultur*) N3 (mechani?e* or mechani?ation*)) or intercrop* or (companion N3 (plant* or variet* or species)) or "integrated soil fertility management" or ISFM or (pest N3 manag*))) OR SJ(((Food N3 (system or produc*) or (agricultur* N3 produc*) or aquacultur* or fisher* or livestock* or ((kitchen or home*) N3 (farm* or garden*)) or "nutrition-sensitive" or (improv* N3 (seed* or variet* or crop*)) or (genetic* N3 modif* N3 (food* or organism*)) or GMO* or ((compost* or manure* or mulch* or fertili* or pesticid* or insecticid*) N3 (appl* or spray* or spread* or use or usage)) or ((drought* or pest* or insect*) N3 (toleran* or resist*)) or (rotat* N3 crop*) or (land N3 manage*) or "fixed distance planting" or (plant* N3 (row or rows*)) or ((farm* or crop or agricultur*) N4 subsid*) or (price* N4 purchas* N4 guarantee*) or ((agricultur* or crop* or rain* or weather or index) N4 insurance) or (irrigat* N4 (project* or program* or access* or improv*)) or "water meter*" or (rain* N3 (fed or feed*)) or (trench* N3 hill*) or hilling or "contour bund*" or zai or "water break" or terrac* or ((farm* or agricultur*) N3 (mechani?e* or mechani?ation*)) or intercrop* or (companion N3 (plant* or variet* or species)) or "integrated soil fertility management" or ISFM or (pest N3 manag*)))

386,595

S5 TI (("farm* field school*" or (farm* N3 (train* or (build N3 capacity))) or "demonstration plot*" or ((agricultur* or rural) N1 extension) or (farm* N3 educat*) or (farm* N3 (organi?ation* or group* or cooperative* or co-op* or club*)) or (("social protection" or microfinance or "micro finance" or microloan* or "micro loan*") N4 (farm* or smallholder* or agricultur*))) OR SJ(("farm* field school*" or (farm* N3 (train* or (build N3 capacity))) or "demonstration plot*" or ((agricultur* or rural) N1 extension) or (farm* N3 educat*) or (farm* N3 (organi?ation* or group* or cooperative* or co-op* or club*)) or (("social protection" or microfinance or "micro finance" or microloan* or "micro loan*") N4 (farm* or smallholder* or agricultur*)))

4,674

S4 TI (((afghanistan OR albania OR algeria OR "american samoa" OR angola OR "antigua and barbuda" OR antigua OR barbuda OR argentina OR armenia OR armenian OR aruba OR azerbaijan OR bahrain OR bangladesh OR barbados OR belarus OR byelarus OR belorussia OR byelorussian OR belize OR "british honduras" OR benin OR dahomey OR bhutan OR bolivia OR "bosnia and herzegovina" OR bosnia OR herzegovina OR botswana OR bechuanaland OR brazil OR brasil OR bulgaria OR "burkina faso" OR "burkina fasso" OR "upper volta" OR burundi OR urundi OR "cabo verde" OR "cape verde" OR cambodia OR kampuchea OR "khmer republic" OR cameroon OR cameron OR cameroun OR "central african republic" OR "ubangi shari" OR chad OR chile OR china OR colombia OR comoros

OR "comoro islands" OR "iles comores" OR mayotte OR "democratic republic of the congo" OR "democratic republic congo" OR congo OR zaire OR "costa rica" OR "cote d'ivoire" OR "cote d'ivoire" OR "cote divoire" OR "cote d ivoire" OR "ivory coast" OR croatia OR cuba OR cyprus OR "czech republic" OR czechoslovakia OR djibouti OR "french somaliland" OR dominica OR "dominican republic" OR ecuador OR egypt OR "united arab republic" OR "el salvador" OR "equatorial guinea" OR "spanish guinea" OR eritrea OR estonia OR eswatini OR swaziland OR ethiopia OR fiji OR gabon OR "gabonese republic" OR gambia OR "georgia (republic)" OR georgian OR ghana OR "gold coast" OR gibraltar OR greece OR grenada OR guam OR guatemala OR guinea OR "guinea bissau" OR guyana OR "british guiana" OR haiti OR hispaniola OR honduras OR hungary OR india OR indonesia OR timor OR iran OR iraq OR "isle of man" OR jamaica OR jordan OR kazakhstan OR kazakh OR kenya OR "democratic people's republic of korea" OR "republic of korea" OR "north korea" OR "south korea" OR korea OR kosovo OR kyrgyzstan OR kirghizia OR kirgizstan OR "kyrgyz republic" OR kirghiz OR laos OR "lao pdr" OR "lao people's democratic republic" OR latvia OR lebanon OR "lebanese republic" OR lesotho OR basutoland OR liberia OR libya OR "libyan arab jamahiriya" OR lithuania OR macau OR macao OR "macedonia (republic)" OR macedonia OR madagascar OR "malagasy republic" OR malawi OR nyasaland OR malaysia OR "malay federation" OR "malaya federation" OR maldives OR "indian ocean islands" OR "indian ocean" OR mali OR malta OR micronesia OR "federated states of micronesia" OR kiribati OR "marshall islands" OR nauru OR "northern mariana islands" OR palau OR tuvalu OR mauritania OR mauritius OR mexico OR moldova OR moldovian OR mongolia OR montenegro OR morocco OR ifni OR mozambique OR "portuguese east africa" OR myanmar OR burma OR namibia OR nepal OR "netherlands antilles" OR nicaragua OR niger OR nigeria OR oman OR muscat OR pakistan OR panama OR "papua new guinea" OR "new guinea" OR paraguay OR peru OR philippines OR philippines OR philippines OR poland OR "polish people's republic" OR portugal OR "portuguese republic" OR "puerto rico" OR romania OR russia OR "russian federation" OR ussr OR "soviet union" OR "union of soviet socialist republics" OR rwnda OR ruanda OR samoa OR "pacific islands" OR polynesia OR "samoan islands" OR "navigator island" OR "navigator islands" OR "sao tome and principe" OR "saudi arabia" OR senegal OR serbia OR seychelles OR "sierra leone" OR slovakia OR "slovak republic" OR slovenia OR melanesia OR "solomon island" OR "solomon islands" OR "norfolk island" OR "norfolk islands" OR somalia OR "south africa" OR "south sudan" OR "sri lanka" OR ceylon OR "saint kitts and nevis" OR "st. kitts and nevis" OR "saint lucia" OR "st. lucia" OR "saint vincent and the grenadines" OR "saint vincent" OR "st. vincent" OR grenadines OR sudan OR suriname OR surinam OR "dutch guiana" OR "netherlands guiana" OR syria OR "syrian arab republic" OR tajikistan OR tadjikistan OR tadjhikistan OR tadjhik OR tanzania OR tanganyika OR thailand OR siam OR "timor leste" OR "east timor" OR togo OR "togolese republic" OR tonga OR "trinidad and tobago" OR trinidad OR tobago OR tunisia OR turkey OR "turkey (republic)" OR turkmenistan OR turkmen OR uganda OR ukraine OR uruguay OR uzbekistan OR uzbek OR vanuatu OR "new hebrides" OR venezuela OR vietnam OR "viet nam" OR "middle east" OR "west bank" OR gaza OR palestine OR yemen OR yugoslavia OR zambia OR zimbabwe OR "northern rhodesia" OR "global south" OR "africa south of the sahara" OR "sub-saharan africa" OR "subsaharan africa" OR "africa, central" OR "central africa" OR "africa, northern" OR "north africa" OR "northern africa" OR magreb OR maghrib OR sahara OR "africa, southern" OR "southern africa" OR "africa, eastern" OR "east africa" OR "eastern africa" OR "africa, western" OR "west africa" OR "western africa" OR "west indies" OR "indian ocean islands" OR caribbean OR "central america" OR

"latin america" OR "south and central america" OR "south america" OR "asia, central" OR "central asia" OR "asia, northern" OR "north asia" OR "northern asia" OR "asia, southeastern" OR "southeastern asia" OR "south eastern asia" OR "southeast asia" OR "south east asia" OR "asia, western" OR "western asia" OR "europe, eastern" OR "east europe" OR "eastern europe" OR "developing country" OR "developing countries" OR "developing nation*" OR "developing population*" OR "developing world" OR "less developed countr*" OR "less developed nation*" OR "less developed population*" OR "less developed world" OR "lesser developed countr*" OR "lesser developed nation*" OR "lesser developed population*" OR "lesser developed world" OR "under developed countr*" OR "under developed nation*" OR "under developed population*" OR "under developed world" OR "underdeveloped countr*" OR "underdeveloped nation*" OR "underdeveloped population*" OR "underdeveloped world" OR "middle income countr*" OR "middle income nation*" OR "middle income population*" OR "low income countr*" OR "low income nation*" OR "low income population*" OR "lower income countr*" OR "lower income nation*" OR "lower income population*" OR "underserved countr*" OR "underserved nation*" OR "underserved population*" OR "underserved world" OR "under served countr*" OR "under served nation*" OR "under served population*" OR "under served world" OR "deprived countr*" OR "deprived nation*" OR "deprived population*" OR "deprived world" OR "poor countr*" OR "poor nation*" OR "poor population*" OR "poor world" OR "poorer countr*" OR "poorer nation*" OR "poorer population*" OR "poorer world" OR "developing econom*" OR "less developed econom*" OR "lesser developed econom*" OR "under developed econom*" OR "underdeveloped econom*" OR "middle income econom*" OR "low income econom*" OR "lower income econom*" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic" OR "lower gross national" OR "lami countr*" OR "third world" OR "lami countr*" OR "transitional countr*" OR "emerging econom*" OR "emerging nation*")) OR AB ((afghanistan OR albania OR algeria OR "american samoa" OR angola OR "antigua and barbuda" OR antigua OR barbuda OR argentina OR armenia OR armenian OR aruba OR azerbaijan OR bahrain OR bangladesh OR barbados OR belarus OR byelarus OR belorussia OR byelorussian OR belize OR "british honduras" OR benin OR dahomey OR bhutan OR bolivia OR "bosnia and herzegovina" OR bosnia OR herzegovina OR botswana OR bechuanaland OR brazil OR bulgaria OR "burkina faso" OR "burkina fasso" OR "upper volta" OR burundi OR urundi OR "cabo verde" OR "cape verde" OR cambodia OR kampuchea OR "khmer republic" OR cameroon OR cameron OR cameroun OR "central african republic" OR "ubangi shari" OR chad OR chile OR china OR colombia OR comoros OR "comoro islands" OR "iles comores" OR mayotte OR "democratic republic of the congo" OR "democratic republic congo" OR congo OR zaire OR "costa rica" OR "cote d'ivoire" OR "cote d'ivoire" OR "cote divoire" OR "cote d ivoire" OR "ivory coast" OR croatia OR cuba OR cyprus OR "czech republic" OR czechoslovakia OR djibouti OR "french somaliland" OR dominica OR "dominican republic" OR ecuador OR egypt OR "united arab republic" OR "el salvador" OR "equatorial guinea" OR "spanish guinea" OR eritrea OR estonia OR eswatini OR swaziland OR ethiopia OR fiji OR gabon OR "gabonese republic" OR gambia OR "georgia (republic)" OR georgian OR ghana OR "gold coast" OR gibraltar OR greece OR grenada OR guam OR guatemala OR guinea OR "guinea bissau" OR guyana OR "british guiana" OR haiti OR hispaniola OR honduras OR hungary OR india OR indonesia OR timor OR iran OR iraq OR "isle of man" OR jamaica OR jordan OR kazakhstan OR kazakh OR kenya OR "democratic people's republic of korea" OR "republic of korea" OR "north korea" OR "south korea" OR korea OR kosovo OR kyrgyzstan OR kirghizia OR kirgizstan OR

"kyrgyz republic" OR kirghiz OR laos OR "lao pdr" OR "lao people's democratic republic" OR latvia OR lebanon OR "lebanese republic" OR lesotho OR basutoland OR liberia OR libya OR "libyan arab jamahiriya" OR lithuania OR macau OR macao OR "macedonia (republic)" OR macedonia OR madagascar OR "malagasy republic" OR malawi OR nyasaland OR malaysia OR "malay federation" OR "malaya federation" OR maldives OR "indian ocean islands" OR "indian ocean" OR mali OR malta OR micronesia OR "federated states of micronesia" OR kiribati OR "marshall islands" OR nauru OR "northern mariana islands" OR palau OR tuvalu OR mauritania OR mauritius OR mexico OR moldova OR moldovian OR mongolia OR montenegro OR morocco OR ifni OR mozambique OR "portuguese east africa" OR myanmar OR burma OR namibia OR nepal OR "netherlands antilles" OR nicaragua OR niger OR nigeria OR oman OR muscat OR pakistan OR panama OR "papua new guinea" OR "new guinea" OR paraguay OR peru OR philippines OR philippines OR phillippines OR poland OR "polish people's republic" OR portugal OR "portuguese republic" OR "puerto rico" OR romania OR russia OR "russian federation" OR ussr OR "soviet union" OR "union of soviet socialist republics" OR rwanda OR ruanda OR samoa OR "pacific islands" OR polynesia OR "samoan islands" OR "navigator island" OR "navigator islands" OR "sao tome and principe" OR "saudi arabia" OR senegal OR serbia OR seychelles OR "sierra leone" OR slovakia OR "slovak republic" OR slovenia OR melanesia OR "solomon island" OR "solomon islands" OR "norfolk island" OR "norfolk islands" OR somalia OR "south africa" OR "south sudan" OR "sri lanka" OR ceylon OR "saint kitts and nevis" OR "st. kitts and nevis" OR "saint lucia" OR "st. lucia" OR "saint vincent and the grenadines" OR "saint vincent" OR "st. vincent" OR grenadines OR sudan OR suriname OR surinam OR "dutch guiana" OR "netherlands guiana" OR syria OR "syrian arab republic" OR tajikistan OR tadjikistan OR tadhikistan OR tadhik OR tanzania OR tanganyika OR thailand OR siam OR "timor leste" OR "east timor" OR togo OR "togolese republic" OR tonga OR "trinidad and tobago" OR trinidad OR tobago OR tunisia OR turkey OR "turkey (republic)" OR turkmenistan OR turkmen OR uganda OR ukraine OR uruguay OR uzbekistan OR uzbek OR vanuatu OR "new hebrides" OR venezuela OR vietnam OR "viet nam" OR "middle east" OR "west bank" OR gaza OR palestine OR yemen OR yugoslavia OR zambia OR zimbabwe OR "northern rhodesia" OR "global south" OR "africa south of the sahara" OR "sub-saharan africa" OR "subsaharan africa" OR "africa, central" OR "central africa" OR "africa, northern" OR "north africa" OR "northern africa" OR magreb OR maghrib OR sahara OR "africa, southern" OR "southern africa" OR "africa, eastern" OR "east africa" OR "eastern africa" OR "africa, western" OR "west africa" OR "western africa" OR "west indies" OR "indian ocean islands" OR caribbean OR "central america" OR "latin america" OR "south and central america" OR "south america" OR "asia, central" OR "central asia" OR "asia, northern" OR "north asia" OR "northern asia" OR "asia, southeastern" OR "southeastern asia" OR "south eastern asia" OR "southeast asia" OR "south east asia" OR "asia, western" OR "western asia" OR "europe, eastern" OR "east europe" OR "eastern europe" OR "developing country" OR "developing countries" OR "developing nation*" OR "developing population*" OR "developing world" OR "less developed countr*" OR "less developed nation*" OR "less developed population*" OR "less developed world" OR "lesser developed countr*" OR "lesser developed nation*" OR "lesser developed population*" OR "lesser developed world" OR "under developed countr*" OR "under developed nation*" OR "under developed population*" OR "under developed world" OR "underdeveloped countr*" OR "underdeveloped nation*" OR "underdeveloped population*" OR "underdeveloped world" OR "middle income countr*" OR "middle income nation*" OR "middle income population*" OR "low income countr*" OR "low

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OR "portuguese republic" OR "puerto rico" OR romania OR russia OR "russian federation" OR ussr OR "soviet union" OR "union of soviet socialist republics" OR rwanda OR ruanda OR samoa OR "pacific islands" OR polynesia OR "samoan islands" OR "navigator island" OR "navigator islands" OR "sao tome and principe" OR "saudi arabia" OR senegal OR serbia OR seychelles OR "sierra leone" OR slovakia OR "slovak republic" OR slovenia OR melanesia OR "solomon island" OR "solomon islands" OR "norfolk island" OR "norfolk islands" OR somalia OR "south africa" OR "south sudan" OR "sri lanka" OR ceylon OR "saint kitts and nevis" OR "st. kitts and nevis" OR "saint lucia" OR "st. lucia" OR "saint vincent and the grenadines" OR "saint vincent" OR "st. vincent" OR grenadines OR sudan OR suriname OR surinam OR "dutch guiana" OR "netherlands guiana" OR syria OR "syrian arab republic" OR tajikistan OR tadjikistan OR tadjhikistan OR tadjhik OR tanzania OR tanganyika OR thailand OR siam OR "timor leste" OR "east timor" OR togo OR "togolese republic" OR tonga OR "trinidad and tobago" OR trinidad OR tobago OR tunisia OR turkey OR "turkey (republic)" OR turkmenistan OR turkmen OR uganda OR ukraine OR uruguay OR uzbekistan OR uzbek OR vanuatu OR "new hebrides" OR venezuela OR vietnam OR "viet nam" OR "middle east" OR "west bank" OR gaza OR palestine OR yemen OR yugoslavia OR zambia OR zimbabwe OR "northern rhodesia" OR "global south" OR "africa south of the sahara" OR "sub-saharan africa" OR "subsaharan africa" OR "africa, central" OR "central africa" OR "africa, northern" OR "north africa" OR "northern africa" OR magreb OR maghrib OR sahara OR "africa, southern" OR "southern africa" OR "africa, eastern" OR "east africa" OR "eastern africa" OR "africa, western" OR "west africa" OR "western africa" OR "west indies" OR "indian ocean islands" OR caribbean OR "central america" OR "latin america" OR "south and central america" OR "south america" OR "asia, central" OR "central asia" OR "asia, northern" OR "north asia" OR "northern asia" OR "asia, southeastern" OR "southeastern asia" OR "south eastern asia" OR "southeast asia" OR "south east asia" OR "asia, western" OR "western asia" OR "europe, eastern" OR "east europe" OR "eastern europe" OR "developing country" OR "developing countries" OR "developing nation*" OR "developing population*" OR "developing world" OR "less developed countr*" OR "less developed nation*" OR "less developed population*" OR "less developed world" OR "lesser developed countr*" OR "lesser developed nation*" OR "lesser developed population*" OR "lesser developed world" OR "under developed countr*" OR "under developed nation*" OR "under developed population*" OR "under developed world" OR "underdeveloped countr*" OR "underdeveloped nation*" OR "underdeveloped population*" OR "underdeveloped world" OR "middle income countr*" OR "middle income nation*" OR "middle income population*" OR "low income countr*" OR "low income nation*" OR "low income population*" OR "lower income countr*" OR "lower income nation*" OR "lower income population*" OR "underserved countr*" OR "underserved nation*" OR "underserved population*" OR "underserved world" OR "under served countr*" OR "under served nation*" OR "under served population*" OR "under served world" OR "deprived countr*" OR "deprived nation*" OR "deprived population*" OR "deprived world" OR "poor countr*" OR "poor nation*" OR "poor population*" OR "poor world" OR "poorer countr*" OR "poorer nation*" OR "poorer population*" OR "poorer world" OR "developing econom*" OR "less developed econom*" OR "lesser developed econom*" OR "under developed econom*" OR "underdeveloped econom*" OR "middle income econom*" OR "low income econom*" OR "lower income econom*" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic" OR "lower gross national" OR Imic OR Imics OR "third world" OR "lami countr*" OR "transitional countr*" OR "emerging econom*" OR "emerging nation*"))

2,689,782
 S3 S1 OR S2
 1,309,354
 S2 TI ("systematic review" or "literature review") OR AB ("systematic review" or "literature review") OR SU ("systematic review" or "literature review") OR SO (cochrane database of systematic reviews) Limiters - Publication Year: 2000-2020
 48,181
 S1 TI ((random* or experiment* or (match* N2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV N2 (estimation or approach)) or regression discontinuity or time series or segment* regression or (non N2 participant*) or ((control or comparison) N2 (group* or condition* or area* or intervention)))) OR AB ((random* or experiment* or (match* N2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV N2 (estimation or approach)) or regression discontinuity or time series or segment* regression or (non N2 participant*) or ((control or comparison) N2 (group* or condition* or area* or intervention)))) OR SU ((random* or experiment* or (match* N2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV N2 (estimation or approach)) or regression discontinuity or time series or segment* regression or (non N2 participant*) or ((control or comparison) N2 (group* or condition* or area* or intervention)))) Limiters - Publication Year: 2000-2020
 1,275,294

Scopus – Searched 27th May 2020

(TITLE-ABS(afghanistan OR albania OR algeria OR "american samoa" OR angola OR "antigua and barbuda" OR antigua OR barbuda OR argentina OR armenia OR armenian OR aruba OR azerbaijan OR bahrain OR bangladesh OR barbados OR belarus OR byelarus OR belorussia OR byelorussian OR belize OR "british honduras" OR benin OR dahomey OR bhutan OR bolivia OR "bosnia and herzegovina" OR bosnia OR herzegovina OR botswana OR bechuanaland OR brazil OR brasil OR bulgaria OR "burkina faso" OR "burkina fasso" OR "upper volta" OR burundi OR urundi OR "cabo verde" OR "cape verde" OR cambodia OR kampuchea OR "khmer republic" OR cameroon OR cameron OR cameroun OR "central african republic" OR "ubangi shari" OR chad OR chile OR china OR colombia OR comoros OR "comoro islands" OR "iles comores" OR mayotte OR "democratic republic of the congo" OR "democratic republic congo" OR congo OR zaire OR "costa rica" OR "cote d'ivoire" OR "cote d'ivoire" OR "cote divoire" OR "cote d ivoire" OR "ivory coast" OR croatia OR cuba OR cyprus OR "czech republic" OR czechoslovakia OR djibouti OR "french somaliland" OR dominica OR "dominican republic" OR ecuador

OR egypt OR "united arab republic" OR "el salvador" OR "equatorial guinea" OR "spanish guinea" OR eritrea OR estonia OR eswatini OR swaziland OR ethiopia OR fiji OR gabon OR "gabonese republic" OR gambia OR "georgia (republic)" OR georgian OR ghana OR "gold coast" OR gibraltar OR greece OR grenada OR guam OR guatemala OR guinea OR "guinea bissau" OR guyana OR "british guiana" OR haiti OR hispaniola OR honduras OR hungary OR india OR indonesia OR timor OR iran OR iraq OR "isle of man" OR jamaica OR jordan OR kazakhstan OR kazakh OR kenya OR "democratic people's republic of korea" OR "republic of korea" OR "north korea" OR "south korea" OR korea OR kosovo OR kyrgyzstan OR kirghizia OR kirgizstan OR "kyrgyz republic" OR kirghiz OR laos OR "lao pdr" OR "lao people's democratic republic" OR latvia OR lebanon OR "lebanese republic" OR lesotho OR basutoland OR liberia OR libya OR "libyan arab jamahiriya" OR lithuania OR macau OR macao OR "macedonia (republic)" OR macedonia OR madagascar OR "malagasy republic" OR malawi OR nyasaland OR malaysia OR "malay federation" OR "malaya federation" OR maldives OR "indian ocean islands" OR "indian ocean" OR mali OR malta OR micronesia OR "federated states of micronesia" OR kiribati OR "marshall islands" OR nauru OR "northern mariana islands" OR palau OR tuvalu OR mauritania OR mauritius OR mexico OR moldova OR moldovian OR mongolia OR montenegro OR morocco OR ifni OR mozambique OR "portuguese east africa" OR myanmar OR burma OR namibia OR nepal OR "netherlands antilles" OR nicaragua OR niger OR nigeria OR oman OR muscat OR pakistan OR panama OR "papua new guinea" OR "new guinea" OR paraguay OR peru OR philippines OR philippines OR phillippines OR poland OR "polish people's republic" OR portugal OR "portuguese republic" OR "puerto rico" OR romania OR russia OR "russian federation" OR ussr OR "soviet union" OR "union of soviet socialist republics" OR rwnda OR ruanda OR samoa OR "pacific islands" OR polynesia OR "samoan islands" OR "navigator island" OR "navigator islands" OR "sao tome and principe" OR "saudi arabia" OR senegal OR serbia OR seychelles OR "sierra leone" OR slovakia OR "slovak republic" OR slovenia OR melanesia OR "solomon island" OR "solomon islands" OR "norfolk island" OR "norfolk islands" OR somalia OR "south africa" OR "south sudan" OR "sri lanka" OR ceylon OR "saint kitts and nevis" OR "st. kitts and nevis" OR "saint lucia" OR "st. lucia" OR "saint vincent and the grenadines" OR "saint vincent" OR "st. vincent" OR grenadines OR sudan OR suriname OR surinam OR "dutch guiana" OR "netherlands guiana" OR syria OR "syrian arab republic" OR tajikistan OR tadjikistan OR tadhikistan OR tadhik OR tanzania OR tanganyika OR thailand OR siam OR "timor leste" OR "east timor" OR togo OR "togolese republic" OR tonga OR "trinidad and tobago" OR trinidad OR tobago OR tunisia OR turkey OR "turkey (republic)" OR turkmenistan OR turkmen OR uganda OR ukraine OR uruguay OR uzbekistan OR uzbek OR vanuatu OR "new hebrides" OR venezuela OR vietnam OR "viet nam" OR "middle east" OR "west bank" OR gaza OR palestine OR yemen OR yugoslavia OR zambia OR zimbabwe OR "northern rhodesia" OR "global south" OR "africa south of the sahara" OR "sub-saharan africa" OR "subsaharan africa" OR "africa, central" OR "central africa" OR "africa, northern" OR "north africa" OR "northern africa" OR magreb OR maghrib OR sahara OR "africa, southern" OR "southern africa" OR "africa, eastern" OR "east africa" OR "eastern africa" OR "africa, western" OR "west africa" OR "western africa" OR "west indies" OR "indian ocean islands" OR caribbean OR "central america" OR "latin america" OR "south and central america" OR "south america" OR "asia, central" OR "central asia" OR "asia, northern" OR "north asia" OR "northern asia" OR "asia, southeastern" OR "southeastern asia" OR "south eastern asia" OR "southeast asia" OR "south east asia" OR "asia, western" OR "western asia" OR "europe, eastern" OR "east europe" OR "eastern europe" OR "developing country"

OR "developing countries" OR "developing nation*" OR "developing population*" OR "developing world" OR "less developed countr*" OR "less developed nation*" OR "less developed population*" OR "less developed world" OR "lesser developed countr*" OR "lesser developed nation*" OR "lesser developed population*" OR "lesser developed world" OR "under developed countr*" OR "under developed nation*" OR "under developed population*" OR "under developed world" OR "underdeveloped countr*" OR "underdeveloped nation*" OR "underdeveloped population*" OR "underdeveloped world" OR "middle income countr*" OR "middle income nation*" OR "middle income population*" OR "low income countr*" OR "low income nation*" OR "low income population*" OR "lower income countr*" OR "lower income nation*" OR "lower income population*" OR "underserved countr*" OR "underserved nation*" OR "underserved population*" OR "underserved world" OR "under served countr*" OR "under served nation*" OR "under served population*" OR "under served world" OR "deprived countr*" OR "deprived nation*" OR "deprived population*" OR "deprived world" OR "poor countr*" OR "poor nation*" OR "poor population*" OR "poor world" OR "poorer countr*" OR "poorer nation*" OR "poorer population*" OR "poorer world" OR "developing econom*" OR "less developed econom*" OR "lesser developed econom*" OR "under developed econom*" OR "underdeveloped econom*" OR "middle income econom*" OR "low income econom*" OR "lower income econom*" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic" OR "lower gross national" OR Imic OR Imics OR "third world" OR "lami countr*" OR "transitional countr*" OR "emerging econom*" OR "emerging nation*") and (TITLE-ABS(random* or experiment* or (match* W/2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV W/2 (estimation or approach)) or "regression discontinuity" or "time series" or "segment* regression" or (non W/2 participant*) or ((control or comparison) W/2 (group* or condition* or area* or intervention or "systematic review" or "literature review*")))) and ((TITLE-ABS(cook* or ((meal* or food*) W/3 prepar*) or (wom?n W/4 (food* or eat* or feed* or meal* or diet*) W/4 (empower* or deci*)) or ((food* or eat* or feed* or breastfeed* or "breast feed*" or meal* or diet* or "F&V") W/4 (inform* or educat* or promot* or campaign* or media or initiative* or (peer W/1 (counsel* or support)) or (community W/3 (meet* or class* or engag* or participat*)) or "door-to-door*")))) or (TITLE-ABS(((food* W/3 (safe* or quality)) W/3 (regulat* or restrict* or polic* or law* or legislat* or inspect*)) or (food* W/3 certif*)) or (TITLE-ABS((food* W/4 ((advertis* or label* or market*) W/3 (ban* or restrict* or regulat* or polic* or law* or legislat*)) or ((supermarket or ((food* or grocer* or convenience or corner) W/1 (store* or market*)) W/4 (design* or redesign* or re-design* or layout* or innovat*)) or (front W/3 pack* W/3 label*)))) or (TITLE-ABS(((food* or consumer*) W/4 (subsid* or "price control*")) or (food* W/4 (cash or "social assistance" or "social safety net" or voucher* or welfare*))) or (TITLE-ABS("food environment*" or (zoning and (food* W/3 (security or access*))) or ((sugar* or SSB or "unhealthy food*") W/3 tax*) or nudg* or ((food* or eat* or feed* or meal* or diet*) W/4 (deci* or ((cultur* or social) W/3 (norm* or preferen*)))) or "ration shop*" or "farmer* market*" or "food desert*" or ((food or grocer*) W/3 retail* W/3 (tax* or subsid* or incentiv*)) or (school* W/4 (meal* or feed* or food* or lunch*))) or (TITLE-ABS((food W/3 (loss* or wast*)) or ((food* or grocer* or soup) W/4 (donat* or pantr* or bank* or kitchen* or transfer*)) or (food* W/4 near* W/4 spoil*)) or (TITLE-ABS(((food* or crop* or staple*) W/3 (fortif* or biofortif*)) or ((recycl* or compost* or biodegrad* or plastic*) W/3 (pack* or

sache*) or (post-harvest W/4 (clean* or winnow* or cann* or mill* or thresh* or hull*)) or ((food* or crop* or grain*) W/3 dry*)) or (TITLE-ABS(((grain* or crop* or agricultur* or farm* or produce) W/4 (silo* or stor* or shed* or warehous*)) or ((agricultur* or farm*) W/3 (collection or distribution) W/3 (centre* or center* or point* or hub*)) or ((farm* or produce or food* or agricultur*) W/4 ("cold chain*" or ((refrigerat* or cold) W/3 (truck* or transport* or transit)))) or ((import or imports or importation or export*) W/4 (tariff* or quota* or ban* or restrict* or regulat*)) or "trade agreement*") or (TITLE-ABS((food W/3 (system or produc*)) or (agricultur* W/3 produc*) or aquacultur* or fisher* or livestock* or ((kitchen or home*) W/3 (farm* or garden*)) or (nutrition W/3 sensitive) or (improv* W/3 (seed* or variet* or crop*)) or (genetic* W/1 modif* W/1 (food* or organism*)) or GMO* or ((compost* or manure* or mulch* or fertili* or pesticid* or insecticid*) W/3 (appl* or spray* or spread* or use or usage)) or ((drought* or pest* or insect*) W/3 (toleran* or resist*)) or (rotat* W/3 crop*) or (land W/3 manage*) or "fixed distance planting" or (plant* W/3 row?) or ((farm* or crop or agricultur*) W/4 subsid*) or (price* W/4 purchas* W/4 guarantee*) or ((agricultur* or crop* or rain* or weather or index) W/4 insurance) or (irrigat* W/4 (project* or program* or access* or improv*)) or "water meter*" or (rain* W/3 (fed or feed*)) or (trench* W/3 hill*) or hilling or "contour bund*" or zai or "water break" or terrac* or ((farm* or agricultur*) W/3 (mechani?e* or mechani?ation*)) or intercrop* or (companion W/3 (plant* or variet* or species)) or "integrated soil fertility management" or ISFM or (pest W/3 manage*)) or (TITLE-ABS("farm* field school*" or (farm* W/3 (train* or (build W/3 capacity)))) or "demonstration plot*" or ((agricultur* or rural) W/1 extension) or (farm* W/3 educat*) or (farm* W/3 (organi?ation* or group* or cooperative* or co-op* or club*)) or ("social protection" or microfinance or "micro finance" or microloan* or "micro loan*") W/4 (farm* or smallholder* or agricultur*)))) AND (LIMIT-TO (PUBYEAR,2020) OR LIMIT-TO (PUBYEAR,2019) OR LIMIT-TO (PUBYEAR,2018) OR LIMIT-TO (PUBYEAR,2017) OR LIMIT-TO (PUBYEAR,2016) OR LIMIT-TO (PUBYEAR,2015) OR LIMIT-TO (PUBYEAR,2014) OR LIMIT-TO (PUBYEAR,2013) OR LIMIT-TO (PUBYEAR,2012) OR LIMIT-TO (PUBYEAR,2011) OR LIMIT-TO (PUBYEAR,2010) OR LIMIT-TO (PUBYEAR,2009) OR LIMIT-TO (PUBYEAR,2008) OR LIMIT-TO (PUBYEAR,2007) OR LIMIT-TO (PUBYEAR,2006) OR LIMIT-TO (PUBYEAR,2005) OR LIMIT-TO (PUBYEAR,2004) OR LIMIT-TO (PUBYEAR,2003) OR LIMIT-TO (PUBYEAR,2002) OR LIMIT-TO (PUBYEAR,2001) OR LIMIT-TO (PUBYEAR,2000)) – **33959 hits**

Agricola (Ebsco) – Searched 26th May 2020

S16 S3 AND S4 AND S15 Limiters - Date Published: 20000101-20201231
1,712

S15 S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR
166,712

S14 TI ((cook* or ((meal* or food*) N3 prepar*) or (wom?n N4 (food* or eat* or feed* or meal* or diet*) N4 (empower* or deci*)) or ((food* or eat* or feed* or breastfeed* or "breast feed*" or meal* or diet* or "F&V") N4 (inform* or educat* or promot* or campaign* or media or initiative* or (peer W1 (counsel* or support)) or (community N3 (meet* or class* or engag* or participat*)) or "door-to-door")))) OR SJ((cook* or ((meal* or food*) N3 prepar*) or (wom?n N4 (food* or eat* or feed* or meal* or diet*) N4 (empower* or deci*)) or ((food* or eat* or feed* or breastfeed* or "breast feed*" or meal* or diet* or "F&V") N4 (inform* or educat* or promot* or campaign* or media or initiative* or (peer W1 (counsel* or support)) or (community N3 (meet* or class* or engag* or participat*)) or "door-to-door"))))

21,034

S13 TI ((((food* N3 (safe* or quality)) N3 (regulat* or restrict* or polic* or law* or legislat* or inspect*)) or (food* N3 certif*))) OR SJ ((((food* N3 (safe* or quality)) N3 (regulat* or restrict* or polic* or law* or legislat* or inspect*)) or (food* N3 certif*)))

605

S12 TI (((food* N4 ((advertis* or label* or market*) N3 (ban* or restrict* or regulat* or polic* or law* or legislat*))) or ((supermarket or ((food* or grocer* or convenience or corner) W1 (store* or market*))) N4 (design* or redesign* or re-design* or layout* or innovat*)) or (front N3 pack* N3 label*))) OR SJ (((food* N4 ((advertis* or label* or market*) N3 (ban* or restrict* or regulat* or polic* or law* or legislat*))) or ((supermarket or ((food* or grocer* or convenience or corner) W1 (store* or market*))) N4 (design* or redesign* or re-design* or layout* or innovat*)) or (front N3 pack* N3 label*)))

292

S11 TI ((((food* or consumer*) N4 (subsid* or "price control*")) or (food* N4 (cash or "social assistance" or "social safety net" or voucher* or welfare)))) OR SJ((((food* or consumer*) N4 (subsid* or "price control*")) or (food* N4 (cash or "social assistance" or "social safety net" or voucher* or welfare))))

361

S10 TI (("food environment*" or (zoning and (food* N3 (security or access*))) or ((sugar* or SSB or "unhealthy food*") N3 tax*) or nudg* or ((food* or eat* or feed* or meal* or diet*) N4 (deci* or ((cultur* or social) N3 (norm* or preferen*)))) or "ration shop*" or "farmer* market*" or "food desert*" or ((food or grocer*) N3 retail* N3 (tax* or subsid* or incentiv*)) or (school* N4 (meal* or feed* or food* or lunch*)))) OR SJ(("food environment*" or (zoning and (food* N3 (security or access*))) or ((sugar* or SSB or "unhealthy food*") N3 tax*) or nudg* or ((food* or eat* or feed* or meal* or diet*) N4 (deci* or ((cultur* or social) N3 (norm* or preferen*)))) or "ration shop*" or "farmer* market*" or "food desert*" or ((food or grocer*) N3 retail* N3 (tax* or subsid* or incentiv*)) or (school* N4 (meal* or feed* or food* or lunch*)))

3,937

S9 TI (((food N3 (loss* or wast*)) or ((food* or grocer* or soup) N4 (donat* or pantr* or bank* or kitchen* or transfer*)) or (food* N4 near* N4 spoil*))) OR SJ(((food N3 (loss* or wast*)) or ((food* or grocer* or soup) N4 (donat* or pantr* or bank* or kitchen* or transfer*)) or (food* N4 near* N4 spoil*)))

3,044

S8 TI ((((food* or crop* or staple*) N3 (fortif* or biofortif*)) or ((recycl* or compost* or biodegrad* or plastic*) N3 (pack* or sache*)) or (post-harvest N4 (clean* or winnow* or cann* or mill* or thresh* or hull*)) or ((food* or crop* or grain*) N3 dry*))) OR SJ((((food* or crop* or staple*) N3 (fortif* or biofortif*)) or ((recycl* or compost* or biodegrad* or plastic*) N3 (pack* or sache*)) or (post-harvest N4 (clean* or winnow* or cann* or mill* or thresh* or hull*)) or ((food* or crop* or grain*) N3 dry*)))

4,183

S7 TI ((((grain* or crop* or agricultur* or farm* or produce) N4 (silo* or stor* or shed* or warehous*)) or ((agricultur* or farm*) N3 (collection or distribution) N3 (centre* or center* or point* or hub*)) or ((farm* or produce or food* or agricultur*) N4 ("cold chain*" or ((refrigerat* or cold) N3 (truck* or transport* or transit)))) or ((import or imports or importation or export*) N4 (tariff* or quota* or ban* or restrict* or regulat*)) or "trade agreement*")) OR SJ((((grain* or crop* or agricultur* or farm* or produce) N4 (silo* or stor* or shed* or warehous*)) or ((agricultur* or farm*) N3 (collection or distribution) N3 (centre* or center* or point* or hub*)) or ((farm* or produce or food* or agricultur*) N4 ("cold chain*" or ((refrigerat* or cold) N3 (truck* or

transport* or transit)))) or ((import or imports or importation or export*) N4 (tariff* or quota* or ban* or restrict* or regulat*)) or "trade agreement**"))

6,214

S6 TI (((Food N3 (system or produc*) or (agricultur* N3 produc*) or aquacultur* or fisher* or livestock* or ((kitchen or home*) N3 (farm* or garden*)) or "nutrition-sensitive" or (improv* N3 (seed* or variet* or crop*)) or (genetic* N3 modif* N3 (food* or organism*)) or GMO* or ((compost* or manure* or mulch* or fertili* or pesticid* or insecticid*) N3 (appl* or spray* or spread* or use or usage)) or ((drought* or pest* or insect*) N3 (toleran* or resist*)) or (rotat* N3 crop*) or (land N3 manage*) or "fixed distance planting" or (plant* N3 (row or rows*)) or ((farm* or crop or agricultur*) N4 subsid*) or (price* N4 purchas* N4 guarantee*) or ((agricultur* or crop* or rain* or weather or index) N4 insurance) or (irrigat* N4 (project* or program* or access* or improv*)) or "water meter*" or (rain* N3 (fed or feed*)) or (trench* N3 hill*) or hilling or "contour bund*" or zai or "water break" or terrac* or ((farm* or agricultur*) N3 (mechani?e* or mechani?ation*)) or intercrop* or (companion N3 (plant* or variet* or species)) or "integrated soil fertility management" or ISFM or (pest N3 manag*))) OR SJ(((Food N3 (system or produc*) or (agricultur* N3 produc*) or aquacultur* or fisher* or livestock* or ((kitchen or home*) N3 (farm* or garden*)) or "nutrition-sensitive" or (improv* N3 (seed* or variet* or crop*)) or (genetic* N3 modif* N3 (food* or organism*)) or GMO* or ((compost* or manure* or mulch* or fertili* or pesticid* or insecticid*) N3 (appl* or spray* or spread* or use or usage)) or ((drought* or pest* or insect*) N3 (toleran* or resist*)) or (rotat* N3 crop*) or (land N3 manage*) or "fixed distance planting" or (plant* N3 (row or rows*)) or ((farm* or crop or agricultur*) N4 subsid*) or (price* N4 purchas* N4 guarantee*) or ((agricultur* or crop* or rain* or weather or index) N4 insurance) or (irrigat* N4 (project* or program* or access* or improv*)) or "water meter*" or (rain* N3 (fed or feed*)) or (trench* N3 hill*) or hilling or "contour bund*" or zai or "water break" or terrac* or ((farm* or agricultur*) N3 (mechani?e* or mechani?ation*)) or intercrop* or (companion N3 (plant* or variet* or species)) or "integrated soil fertility management" or ISFM or (pest N3 manag*)))

122,856

S5 TI (("farm* field school*" or (farm* N3 (train* or (build N3 capacity)))) or "demonstration plot*" or ((agricultur* or rural) N1 extension) or (farm* N3 educat*) or (farm* N3 (organi?ation* or group* or cooperative* or co-op* or club*)) or (("social protection" or microfinance or "micro finance" or microloan* or "micro loan**") N4 (farm* or smallholder* or agricultur*))) OR SJ(("farm* field school*" or (farm* N3 (train* or (build N3 capacity)))) or "demonstration plot*" or ((agricultur* or rural) N1 extension) or (farm* N3 educat*) or (farm* N3 (organi?ation* or group* or cooperative* or co-op* or club*)) or (("social protection" or microfinance or "micro finance" or microloan* or "micro loan**") N4 (farm* or smallholder* or agricultur*)))

7,058

S4 TI (((afghanistan OR albania OR algeria OR "american samoa" OR angola OR "antigua and barbuda" OR antigua OR barbuda OR argentina OR armenia OR armenian OR aruba OR azerbaijan OR bahrain OR bangladesh OR barbados OR belarus OR byelarus OR belorussia OR byelorussian OR belize OR "british honduras" OR benin OR dahomey OR bhutan OR bolivia OR "bosnia and herzegovina" OR bosnia OR herzegovina OR botswana OR bechuanaland OR brazil OR brasil OR bulgaria OR "burkina faso" OR "burkina fasso" OR "upper volta" OR burundi OR urundi OR "cabo verde" OR "cape verde" OR cambodia OR kampuchea OR "khmer republic" OR cameroon OR cameron OR cameroun OR "central african republic" OR "ubangi shari" OR chad OR chile OR china OR colombia OR comoros OR "comoro islands" OR "iles comores" OR mayotte OR "democratic republic of the congo" OR "democratic republic congo" OR congo OR zaire OR "costa rica" OR

"cote d'ivoire" OR "cote d'ivoire" OR "cote divoire" OR "cote d ivoire" OR "ivory coast" OR croatia OR cuba OR cyprus OR "czech republic" OR czechoslovakia OR djibouti OR "french somaliland" OR dominica OR "dominican republic" OR ecuador OR egypt OR "united arab republic" OR "el salvador" OR "equatorial guinea" OR "spanish guinea" OR eritrea OR estonia OR eswatini OR swaziland OR ethiopia OR fiji OR gabon OR "gabonese republic" OR gambia OR "georgia (republic)" OR georgian OR ghana OR "gold coast" OR gibraltar OR greece OR grenada OR guam OR guatemala OR guinea OR "guinea bissau" OR guyana OR "british guiana" OR haiti OR hispaniola OR honduras OR hungary OR india OR indonesia OR timor OR iran OR iraq OR "isle of man" OR jamaica OR jordan OR kazakhstan OR kazakh OR kenya OR "democratic people's republic of korea" OR "republic of korea" OR "north korea" OR "south korea" OR korea OR kosovo OR kyrgyzstan OR kirghizia OR kirgizstan OR "kyrgyz republic" OR kirghiz OR laos OR "lao pdr" OR "lao people's democratic republic" OR latvia OR lebanon OR "lebanese republic" OR lesotho OR basutoland OR liberia OR libya OR "libyan arab jamahiriya" OR lithuania OR macau OR macao OR "macedonia (republic)" OR macedonia OR madagascar OR "malagasy republic" OR malawi OR nyasaland OR malaysia OR "malay federation" OR "malaya federation" OR maldives OR "indian ocean islands" OR "indian ocean" OR mali OR malta OR micronesia OR "federated states of micronesia" OR kiribati OR "marshall islands" OR nauru OR "northern mariana islands" OR palau OR tuvalu OR mauritania OR mauritius OR mexico OR moldova OR moldovian OR mongolia OR montenegro OR morocco OR ifni OR mozambique OR "portuguese east africa" OR myanmar OR burma OR namibia OR nepal OR "netherlands antilles" OR nicaragua OR niger OR nigeria OR oman OR muscat OR pakistan OR panama OR "papua new guinea" OR "new guinea" OR paraguay OR peru OR philippines OR philippines OR phillippines OR poland OR "polish people's republic" OR portugal OR "portuguese republic" OR "puerto rico" OR romania OR russia OR "russian federation" OR ussr OR "soviet union" OR "union of soviet socialist republics" OR rwnda OR ruanda OR samoa OR "pacific islands" OR polynesia OR "samoan islands" OR "navigator island" OR "navigator islands" OR "sao tome and principe" OR "saudi arabia" OR senegal OR serbia OR seychelles OR "sierra leone" OR slovakia OR "slovak republic" OR slovenia OR melanesia OR "solomon island" OR "solomon islands" OR "norfolk island" OR "norfolk islands" OR somalia OR "south africa" OR "south sudan" OR "sri lanka" OR ceylon OR "saint kitts and nevis" OR "st. kitts and nevis" OR "saint lucia" OR "st. lucia" OR "saint vincent and the grenadines" OR "saint vincent" OR "st. vincent" OR grenadines OR sudan OR suriname OR surinam OR "dutch guiana" OR "netherlands guiana" OR syria OR "syrian arab republic" OR tajikistan OR tadjikistan OR tadjhikistan OR tadjhik OR tanzania OR tanganyika OR thailand OR siam OR "timor leste" OR "east timor" OR togo OR "togolese republic" OR tonga OR "trinidad and tobago" OR trinidad OR tobago OR tunisia OR turkey OR "turkey (republic)" OR turkmenistan OR turkmen OR uganda OR ukraine OR uruguay OR uzbekistan OR uzbek OR vanuatu OR "new hebrides" OR venezuela OR vietnam OR "viet nam" OR "middle east" OR "west bank" OR gaza OR palestine OR yemen OR yugoslavia OR zambia OR zimbabwe OR "northern rhodesia" OR "global south" OR "africa south of the sahara" OR "sub-saharan africa" OR "subsaharan africa" OR "africa, central" OR "central africa" OR "africa, northern" OR "north africa" OR "northern africa" OR magreb OR maghrib OR sahara OR "africa, southern" OR "southern africa" OR "africa, eastern" OR "east africa" OR "eastern africa" OR "africa, western" OR "west africa" OR "western africa" OR "west indies" OR "indian ocean islands" OR caribbean OR "central america" OR "latin america" OR "south and central america" OR "south america" OR "asia, central" OR "central asia" OR "asia, northern" OR "north asia" OR "northern asia"

OR "asia, southeastern" OR "southeastern asia" OR "south eastern asia" OR "southeast asia" OR "south east asia" OR "asia, western" OR "western asia" OR "europe, eastern" OR "east europe" OR "eastern europe" OR "developing country" OR "developing countries" OR "developing nation*" OR "developing population*" OR "developing world" OR "less developed countr*" OR "less developed nation*" OR "less developed population*" OR "less developed world" OR "lesser developed countr*" OR "lesser developed nation*" OR "lesser developed population*" OR "lesser developed world" OR "under developed countr*" OR "under developed nation*" OR "under developed population*" OR "under developed world" OR "underdeveloped countr*" OR "underdeveloped nation*" OR "underdeveloped population*" OR "underdeveloped world" OR "middle income countr*" OR "middle income nation*" OR "middle income population*" OR "low income countr*" OR "low income nation*" OR "low income population*" OR "lower income countr*" OR "lower income nation*" OR "lower income population*" OR "underserved countr*" OR "underserved nation*" OR "underserved population*" OR "underserved world" OR "under served countr*" OR "under served nation*" OR "under served population*" OR "under served world" OR "deprived countr*" OR "deprived nation*" OR "deprived population*" OR "deprived world" OR "poor countr*" OR "poor nation*" OR "poor population*" OR "poor world" OR "poorer countr*" OR "poorer nation*" OR "poorer population*" OR "poorer world" OR "developing econom*" OR "less developed econom*" OR "lesser developed econom*" OR "under developed econom*" OR "underdeveloped econom*" OR "middle income econom*" OR "low income econom*" OR "lower income econom*" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic" OR "lower gross national" OR "lami countr*" OR "lami countr*" OR "transitional countr*" OR "emerging econom*" OR "emerging nation*")) OR AB (((afghanistan OR albania OR algeria OR "american samoa" OR angola OR "antigua and barbuda" OR antigua OR barbuda OR argentina OR armenia OR armenia OR aruba OR azerbaijan OR bahrain OR bangladesh OR barbados OR belarus OR byelarus OR belorussia OR byelorussian OR belize OR "british honduras" OR benin OR dahomey OR bhutan OR bolivia OR "bosnia and herzegovina" OR bosnia OR herzegovina OR botswana OR bechuanaland OR brazil OR brasil OR bulgaria OR "burkina faso" OR "burkina fasso" OR "upper volta" OR burundi OR urundi OR "cabo verde" OR "cape verde" OR cambodia OR kampuchea OR "khmer republic" OR cameroon OR cameron OR cameroun OR "central african republic" OR "ubangi shari" OR chad OR chile OR china OR colombia OR comoros OR "comoro islands" OR "iles comores" OR mayotte OR "democratic republic of the congo" OR "democratic republic congo" OR congo OR zaire OR "costa rica" OR "cote d'ivoire" OR "cote d'ivoire" OR "cote divoire" OR "cote d ivoire" OR "ivory coast" OR croatia OR cuba OR cyprus OR "czech republic" OR czechoslovakia OR djibouti OR "french somaliland" OR dominica OR "dominican republic" OR ecuador OR egypt OR "united arab republic" OR "el salvador" OR "equatorial guinea" OR "spanish guinea" OR eritrea OR estonia OR eswatini OR swaziland OR ethiopia OR fiji OR gabon OR "gabonese republic" OR gambia OR "georgia (republic)" OR georgian OR ghana OR "gold coast" OR gibraltar OR greece OR grenada OR guam OR guatemala OR guinea OR "guinea bissau" OR guyana OR "british guiana" OR haiti OR hispaniola OR honduras OR hungary OR india OR indonesia OR timor OR iran OR iraq OR "isle of man" OR jamaica OR jordan OR kazakhstan OR kazakh OR kenya OR "democratic people's republic of korea" OR "republic of korea" OR "north korea" OR "south korea" OR korea OR kosovo OR kyrgyzstan OR kirghizia OR kirgizstan OR "kyrgyz republic" OR kirghiz OR laos OR "lao pdr" OR "lao people's democratic republic" OR latvia OR lebanon OR "lebanese republic" OR lesotho OR basutoland

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rwanda OR ruanda OR samoa OR "pacific islands" OR polynesia OR "samoan islands" OR "navigator island" OR "navigator islands" OR "sao tome and principe" OR "saudi arabia" OR senegal OR serbia OR seychelles OR "sierra leone" OR slovakia OR "slovak republic" OR slovenia OR melanesia OR "solomon island" OR "solomon islands" OR "norfolk island" OR "norfolk islands" OR somalia OR "south africa" OR "south sudan" OR "sri lanka" OR ceylon OR "saint kitts and nevis" OR "st. kitts and nevis" OR "saint lucia" OR "st. lucia" OR "saint vincent and the grenadines" OR "saint vincent" OR "st. vincent" OR grenadines OR sudan OR suriname OR surinam OR "dutch guiana" OR "netherlands guiana" OR syria OR "syrian arab republic" OR tajikistan OR tadjikistan OR tadhikistan OR tadhik OR tanzania OR tanganyika OR thailand OR siam OR "timor leste" OR "east timor" OR togo OR "togolese republic" OR tonga OR "trinidad and tobago" OR trinidad OR tobago OR tunisia OR turkey OR "turkey (republic)" OR turkmenistan OR turkmen OR uganda OR ukraine OR uruguay OR uzbekistan OR uzbek OR vanuatu OR "new hebrides" OR venezuela OR vietnam OR "viet nam" OR "middle east" OR "west bank" OR gaza OR palestine OR yemen OR yugoslavia OR zambia OR zimbabwe OR "northern rhodesia" OR "global south" OR "africa south of the sahara" OR "sub-saharan africa" OR "subsaharan africa" OR "africa, central" OR "central africa" OR "africa, northern" OR "north africa" OR "northern africa" OR magreb OR maghrib OR sahara OR "africa, southern" OR "southern africa" OR "africa, eastern" OR "east africa" OR "eastern africa" OR "africa, western" OR "west africa" OR "western africa" OR "west indies" OR "indian ocean islands" OR caribbean OR "central america" OR "latin america" OR "south and central america" OR "south america" OR "asia, central" OR "central asia" OR "asia, northern" OR "north asia" OR "northern asia" OR "asia, southeastern" OR "southeastern asia" OR "south eastern asia" OR "southeast asia" OR "south east asia" OR "asia, western" OR "western asia" OR "europe, eastern" OR "east europe" OR "eastern europe" OR "developing country" OR "developing countries" OR "developing nation*" OR "developing population*" OR "developing world" OR "less developed countr*" OR "less developed nation*" OR "less developed population*" OR "less developed world" OR "lesser developed countr*" OR "lesser developed nation*" OR "lesser developed population*" OR "lesser developed world" OR "under developed countr*" OR "under developed nation*" OR "under developed population*" OR "under developed world" OR "underdeveloped countr*" OR "underdeveloped nation*" OR "underdeveloped population*" OR "underdeveloped world" OR "middle income countr*" OR "middle income nation*" OR "middle income population*" OR "low income countr*" OR "low income nation*" OR "low income population*" OR "lower income countr*" OR "lower income nation*" OR "lower income population*" OR "underserved countr*" OR "underserved nation*" OR "underserved population*" OR "underserved world" OR "under served countr*" OR "under served nation*" OR "under served population*" OR "under served world" OR "deprived countr*" OR "deprived nation*" OR "deprived population*" OR "deprived world" OR "poor countr*" OR "poor nation*" OR "poor population*" OR "poor world" OR "poorer countr*" OR "poorer nation*" OR "poorer population*" OR "poorer world" OR "developing econom*" OR "less developed econom*" OR "lesser developed econom*" OR "under developed econom*" OR "underdeveloped econom*" OR "middle income econom*" OR "low income econom*" OR "lower income econom*" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic" OR "lower gross national" OR Imic OR Imics OR "third world" OR "lami countr*" OR "transitional countr*" OR "emerging econom*" OR "emerging nation*"))

591,723

S3 S1 OR S2

540,906

S2 TI (("systematic review" or "literature review")) OR AB (("systematic review" or "literature review")) OR SU (("systematic review" or "literature review")) OR SO (cochrane database of systematic reviews)

9,240

S1 TI ((random* or experiment* or (match* N2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV N2 (estimation or approach)) or regression discontinuity or time series or segment* regression or (non N2 participant* or ((control or comparison) N2 (group* or condition* or area* or intervention)))) OR AB ((random* or experiment* or (match* N2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV N2 (estimation or approach)) or regression discontinuity or time series or segment* regression or (non N2 participant* or ((control or comparison) N2 (group* or condition* or area* or intervention)))) OR SU ((random* or experiment* or (match* N2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV N2 (estimation or approach)) or regression discontinuity or time series or segment* regression or (non N2 participant* or ((control or comparison) N2 (group* or condition* or area* or intervention))))

533,962

Africa-Wide (Ebsco) – Searched 26th May 2020

S16 S1 AND S12 AND S15

Database - Africa-Wide Information 4,338

S15 S13 OR S14

205,244

S14 TI (("systematic review" or "literature review")) OR AB (("systematic review" or "literature review")) OR SU (("systematic review" or "literature review")) OR SO (cochrane database of systematic reviews)

16,498

S13 TI ((random* or experiment* or (match* N2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV N2 (estimation or approach)) or regression discontinuity or time series or segment* regression or (non N2 participant* or ((control or comparison) N2 (group* or condition* or area* or intervention)))) OR AB ((random* or experiment* or (match* N2 (propensity or coarsened or covariate)) or

"propensity score" or ("difference in difference*" or "difference-in-difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV N2 (estimation or approach)) or regression discontinuity or time series or segment* regression or (non N2 participant*) or ((control or comparison) N2 (group* or condition* or area* or intervention)))) OR SU ((random* or experiment* or (match* N2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV N2 (estimation or approach)) or regression discontinuity or time series or segment* regression or (non N2 participant*) or ((control or comparison) N2 (group* or condition* or area* or intervention))))

193,261

S12 S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11

100,603

S11 TI (("farm* field school*" or (farm* N3 (train* or (build N3 capacity)))) or "demonstration plot*" or ((agricultur* or rural) N1 extension) or (farm* N3 educat*) or (farm* N3 (organi?ation* or group* or cooperative* or co-op* or club*)) or (("social protection" or microfinance or "micro finance" or microloan* or "micro loan*") N4 (farm* or smallholder* or agricultur*))) OR SU(("farm* field school*" or (farm* N3 (train* or (build N3 capacity)))) or "demonstration plot*" or ((agricultur* or rural) N1 extension) or (farm* N3 educat*) or (farm* N3 (organi?ation* or group* or cooperative* or co-op* or club*)) or (("social protection" or microfinance or "micro finance" or microloan* or "micro loan*") N4 (farm* or smallholder* or agricultur*)))

3,274

S10 TI ((cook* or ((meal* or food*) N3 prepar*) or (wom?n N4 (food* or eat* or feed* or meal* or diet*) N4 (empower* or deci*)) or ((food* or eat* or feed* or breastfeed* or "breast feed*" or meal* or diet* or "F&V") N4 (inform* or educat* or promot* or campaign* or media or initiative* or (peer N1 (counsel* or support)) or (community N3 (meet* or class* or engag* or participat*)) or "door-to-door")))) OR SU((cook* or ((meal* or food*) N3 prepar*) or (wom?n N4 (food* or eat* or feed* or meal* or diet*) N4 (empower* or deci*)) or ((food* or eat* or feed* or breastfeed* or "breast feed*" or meal* or diet* or "F&V") N4 (inform* or educat* or promot* or campaign* or media or initiative* or (peer N1 (counsel* or support)) or (community N3 (meet* or class* or engag* or participat*)) or "door-to-door"))))

8,084

S9 TI ((((food* N3 (safe* or quality)) N3 (regulat* or restrict* or polic* or law* or legislat* or inspect*)) or (food* N3 certif*))) OR SU((((food* N3 (safe* or quality)) N3 (regulat* or restrict* or polic* or law* or legislat* or inspect*)) or (food* N3 certif*))

86

S8 TI (((food* N4 ((advertis* or label* or market*) N3 (ban* or restrict* or regulat* or polic* or law* or legislat*))) or ((supermarket or ((food* or grocer* or convenience or corner) N1 (store* or market*))) N4 (design* or redesign* or re-design* or layout* or innovat*)) or (front N3 pack* N3 label*))) OR SU(((food* N4 ((advertis* or label* or market*) N3 (ban* or restrict* or regulat* or polic* or law* or legislat*))) or ((supermarket or ((food* or grocer* or convenience or corner) N1 (store* or market*))) N4 (design* or redesign* or re-design* or layout* or innovat*)) or (front N3 pack* N3 label*)))

98

S7 TI ((((food* or consumer*) N4 (subsid* or "price control*")) or (food* N4 (cash or "social assistance" or "social safety net" or voucher* or welfare)))) OR SU((((food* or consumer*) N4 (subsid* or "price control*")) or (food* N4 (cash or "social assistance" or "social safety net" or voucher* or welfare))))

193

S6 TI (("food environment*" or (zoning and (food* N3 (security or access*))) or ((sugar* or SSB or "unhealthy food*") N3 tax*) or nudg* or ((food* or eat* or feed* or meal* or diet*) N4 (deci* or ((cultur* or social) N3 (norm* or preferen*)))) or "ration shop*" or "farmer* market*" or "food desert*" or ((food or grocer*) N3 retail* N3 (tax* or subsid* or incentiv*)) or (school* N4 (meal* or feed* or food* or lunch*)))) OR SU(("food environment*" or (zoning and (food* N3 (security or access*))) or ((sugar* or SSB or "unhealthy food*") N3 tax*) or nudg* or ((food* or eat* or feed* or meal* or diet*) N4 (deci* or ((cultur* or social) N3 (norm* or preferen*)))) or "ration shop*" or "farmer* market*" or "food desert*" or ((food or grocer*) N3 retail* N3 (tax* or subsid* or incentiv*)) or (school* N4 (meal* or feed* or food* or lunch*))))

713

S5 TI (((food N3 (loss* or wast*)) or ((food* or grocer* or soup) N4 (donat* or pantr* or bank* or kitchen* or transfer*)) or (food* N4 near* N4 spoil*))) OR SU(((food N3 (loss* or wast*)) or ((food* or grocer* or soup) N4 (donat* or pantr* or bank* or kitchen* or transfer*)) or (food* N4 near* N4 spoil*)))

521

S4 TI ((((food* or crop* or staple*) N3 (fortif* or biofortif*)) or ((recycl* or compost* or biodegrad* or plastic*) N3 (pack* or sache*)) or (post-harvest N4 (clean* or winnow* or cann* or mill* or thresh* or hull*)) or ((food* or crop* or grain*) N3 dry*))) OR SU((((food* or crop* or staple*) N3 (fortif* or biofortif*)) or ((recycl* or compost* or biodegrad* or plastic*) N3 (pack* or sache*)) or (post-harvest N4 (clean* or winnow* or cann* or mill* or thresh* or hull*)) or ((food* or crop* or grain*) N3 dry*)))

1,322

S3 TI ((((grain* or crop* or agricultur* or farm* or produce) N4 (silo* or stor* or shed* or warehous*)) or ((agricultur* or farm*) N3 (collection or distribution) N3 (centre* or center* or point* or hub*)) or ((farm* or produce or food* or agricultur*) N4 ("cold chain*" or ((refrigerat* or cold) N3 (truck* or transport* or transit)))) or ((import or imports or importation or export*) N4 (tariff* or quota* or ban* or restrict* or regulat*)) or "trade agreement*")) OR SU((((grain* or crop* or agricultur* or farm* or produce) N4 (silo* or stor* or shed* or warehous*)) or ((agricultur* or farm*) N3 (collection or distribution) N3 (centre* or center* or point* or hub*)) or ((farm* or produce or food* or agricultur*) N4 ("cold chain*" or ((refrigerat* or cold) N3 (truck* or transport* or transit)))) or ((import or imports or importation or export*) N4 (tariff* or quota* or ban* or restrict* or regulat*)) or "trade agreement*"))

4,664

S2 TI (((Food N3 (system or produc*)) or (agricultur* N3 produc*) or aquacultur* or fisher* or livestock* or ((kitchen or home*) N3 (farm* or garden*)) or "nutrition-sensitive" or (improv* N3 (seed* or variet* or crop*)) or (genetic* N3 modif* N3 (food* or organism*)) or GMO* or ((compost* or manure* or mulch* or fertili* or pesticid* or insecticid*) N3 (appli* or spray* or spread* or use or usage)) or ((drought* or pest* or insect*) N3 (toleran* or resist*)) or (rotat* N3 crop*) or (land N3 manage*) or "fixed distance planting" or (plant* N3 (row or rows*)) or ((farm* or crop or agricultur*) N4 subsid*) or (price* N4 purchas* N4 guarantee*) or ((agricultur* or crop* or rain* or weather or index) N4 insurance) or (irrigat* N4 (project* or program* or access* or improv*)) or "water meter*" or (rain* N3 (fed or feed*)) or (trench* N3 hill*) or hilling or "contour bund*" or zai or "water break" or terrac* or ((farm* or agricultur*) N3

(mechani?e* or mechani?ation*) or intercrop* or (companion N3 (plant* or variet* or species)) or "integrated soil fertility management" or ISFM or (pest N3 manag*)) OR SU(((Food N3 (system or produc*) or (agricultur* N3 produc*) or aquacultur* or fisher* or livestock* or ((kitchen or home*) N3 (farm* or garden*)) or "nutrition-sensitive" or (improv* N3 (seed* or variet* or crop*)) or (genetic* N3 modif* N3 (food* or organism*)) or GMO* or ((compost* or manure* or mulch* or fertili* or pesticid* or insecticid*) N3 (appl* or spray* or spread* or use or usage)) or ((drought* or pest* or insect*) N3 (toleran* or resist*)) or (rotat* N3 crop*) or (land N3 manage*) or "fixed distance planting" or (plant* N3 (row or rows*)) or ((farm* or crop or agricultur*) N4 subsid*) or (price* N4 purchas* N4 guarantee*) or ((agricultur* or crop* or rain* or weather or index) N4 insurance) or (irrigat* N4 (project* or program* or access* or improv*)) or "water meter*" or (rain* N3 (fed or feed*)) or (trench* N3 hill*) or hilling or "contour bund*" or zai or "water break" or terrac* or ((farm* or agricultur*) N3 (mechani?e* or mechani?ation*)) or intercrop* or (companion N3 (plant* or variet* or species)) or "integrated soil fertility management" or ISFM or (pest N3 manag*))

83,252

S1 TI ((afghanistan OR albania OR algeria OR "american samoa" OR angola OR "antigua and barbuda" OR antigua OR barbuda OR argentina OR armenia OR armenian OR aruba OR azerbaijan OR bahrain OR bangladesh OR barbados OR belarus OR byelarus OR belorussia OR byelorussian OR belize OR "british honduras" OR benin OR dahomey OR bhutan OR bolivia OR "bosnia and herzegovina" OR bosnia OR herzegovina OR botswana OR bechuanaland OR brazil OR brasil OR bulgaria OR "burkina faso" OR "burkina fasso" OR "upper volta" OR burundi OR urundi OR "cabo verde" OR "cape verde" OR cambodia OR kampuchea OR "khmer republic" OR cameroon OR cameron OR cameroun OR "central african republic" OR "ubangi shari" OR chad OR chile OR china OR colombia OR comoros OR "comoro islands" OR "iles comores" OR mayotte OR "democratic republic of the congo" OR "democratic republic congo" OR congo OR zaire OR "costa rica" OR "cote d'ivoire" OR "cote d'ivoire" OR "cote divoire" OR "cote d ivoire" OR "ivory coast" OR croatia OR cuba OR cyprus OR "czech republic" OR czechoslovakia OR djibouti OR "french somaliland" OR dominica OR "dominican republic" OR ecuador OR egypt OR "united arab republic" OR "el salvador" OR "equatorial guinea" OR "spanish guinea" OR eritrea OR estonia OR eswatini OR swaziland OR ethiopia OR fiji OR gabon OR "gabonese republic" OR gambia OR "georgia (republic)" OR georgian OR ghana OR "gold coast" OR gibraltar OR greece OR grenada OR guam OR guatemala OR guinea OR "guinea bissau" OR guyana OR "british guiana" OR haiti OR hispaniola OR honduras OR hungary OR india OR indonesia OR timor OR iran OR iraq OR "isle of man" OR jamaica OR jordan OR kazakhstan OR kazakh OR kenya OR "democratic people's republic of korea" OR "republic of korea" OR "north korea" OR "south korea" OR korea OR kosovo OR kyrgyzstan OR kirghizia OR kirgizstan OR "kyrgyz republic" OR kirghiz OR laos OR "lao pdr" OR "lao people's democratic republic" OR latvia OR lebanon OR "lebanese republic" OR lesotho OR basutoland OR liberia OR libya OR "libyan arab jamahiriya" OR lithuania OR macau OR macao OR "macedonia (republic)" OR macedonia OR madagascar OR "malagasy republic" OR malawi OR nyasaland OR malaysia OR "malay federation" OR "malaya federation" OR maldives OR "indian ocean islands" OR "indian ocean" OR mali OR malta OR micronesia OR "federated states of micronesia" OR kiribati OR "marshall islands" OR nauru OR "northern mariana islands" OR palau OR tuvalu OR mauritania OR mauritius OR mexico OR moldova OR moldovian OR mongolia OR montenegro OR morocco OR ifni OR mozambique OR "portuguese east africa" OR myanmar OR burma OR namibia OR nepal OR "netherlands antilles" OR nicaragua OR niger OR nigeria OR oman OR muscat OR pakistan OR panama OR

"papua new guinea" OR "new guinea" OR paraguay OR peru OR philippines OR philipines OR phillipines OR phillippines OR poland OR "polish people's republic" OR portugal OR "portuguese republic" OR "puerto rico" OR romania OR russia OR "russian federation" OR ussr OR "soviet union" OR "union of soviet socialist republics" OR rwnda OR ruanda OR samoa OR "pacific islands" OR polynesia OR "samoan islands" OR "navigator island" OR "navigator islands" OR "sao tome and principe" OR "saudi arabia" OR senegal OR serbia OR seychelles OR "sierra leone" OR slovakia OR "slovak republic" OR slovenia OR melanesia OR "solomon island" OR "solomon islands" OR "norfolk island" OR "norfolk islands" OR somalia OR "south africa" OR "south sudan" OR "sri lanka" OR ceylon OR "saint kitts and nevis" OR "st. kitts and nevis" OR "saint lucia" OR "st. lucia" OR "saint vincent and the grenadines" OR "saint vincent" OR "st. vincent" OR grenadines OR sudan OR suriname OR surinam OR "dutch guiana" OR "netherlands guiana" OR syria OR "syrian arab republic" OR tajikistan OR tadjikistan OR tadhikistan OR tadhik OR tanzania OR tanganyika OR thailand OR siam OR "timor leste" OR "east timor" OR togo OR "togolese republic" OR tonga OR "trinidad and tobago" OR trinidad OR tobago OR tunisia OR turkey OR "turkey (republic)" OR turkmenistan OR turkmen OR uganda OR ukraine OR uruguay OR uzbekistan OR uzbek OR vanuatu OR "new hebrides" OR venezuela OR vietnam OR "viet nam" OR "middle east" OR "west bank" OR gaza OR palestine OR yemen OR yugoslavia OR zambia OR zimbabwe OR "northern rhodesia" OR "global south" OR "africa south of the sahara" OR "sub-saharan africa" OR "subsaharan africa" OR "africa, central" OR "central africa" OR "africa, northern" OR "north africa" OR "northern africa" OR magreb OR maghrib OR sahara OR "africa, southern" OR "southern africa" OR "africa, eastern" OR "east africa" OR "eastern africa" OR "africa, western" OR "west africa" OR "western africa" OR "west indies" OR "indian ocean islands" OR caribbean OR "central america" OR "latin america" OR "south and central america" OR "south america" OR "asia, central" OR "central asia" OR "asia, northern" OR "north asia" OR "northern asia" OR "asia, southeastern" OR "southeastern asia" OR "south eastern asia" OR "southeast asia" OR "south east asia" OR "asia, western" OR "western asia" OR "europe, eastern" OR "east europe" OR "eastern europe" OR "developing country" OR "developing countries" OR "developing nation*" OR "developing population*" OR "developing world" OR "less developed countr*" OR "less developed nation*" OR "less developed population*" OR "less developed world" OR "lesser developed countr*" OR "lesser developed nation*" OR "lesser developed population*" OR "lesser developed world" OR "under developed countr*" OR "under developed nation*" OR "under developed population*" OR "under developed world" OR "underdeveloped countr*" OR "underdeveloped nation*" OR "underdeveloped population*" OR "underdeveloped world" OR "middle income countr*" OR "middle income nation*" OR "middle income population*" OR "low income countr*" OR "low income nation*" OR "low income population*" OR "lower income countr*" OR "lower income nation*" OR "lower income population*" OR "underserved countr*" OR "underserved nation*" OR "underserved population*" OR "underserved world" OR "under served countr*" OR "under served nation*" OR "under served population*" OR "under served world" OR "deprived countr*" OR "deprived nation*" OR "deprived population*" OR "deprived world" OR "poor countr*" OR "poor nation*" OR "poor population*" OR "poor world" OR "poorer countr*" OR "poorer nation*" OR "poorer population*" OR "poorer world" OR "developing econom*" OR "less developed econom*" OR "lesser developed econom*" OR "under developed econom*" OR "underdeveloped econom*" OR "middle income econom*" OR "low income econom*" OR "lower income econom*" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic"

OR "lower gross national" OR Imic OR Imics OR "third world" OR "lami countr*" OR "transitional countr*" OR "emerging econom*" OR "emerging nation*"))) OR AB (((afghanistan OR albania OR algeria OR "american samoa" OR angola OR "antigua and barbuda" OR antigua OR barbuda OR argentina OR armenia OR armenian OR aruba OR azerbaijan OR bahrain OR bangladesh OR barbados OR belarus OR byelarus OR belorussia OR byelorussian OR belize OR "british honduras" OR benin OR dahomey OR bhutan OR bolivia OR "bosnia and herzegovina" OR bosnia OR herzegovina OR botswana OR bechuanaland OR brazil OR brasil OR bulgaria OR "burkina faso" OR "burkina fasso" OR "upper volta" OR burundi OR urundi OR "cabo verde" OR "cape verde" OR cambodia OR kampuchea OR "khmer republic" OR cameroon OR cameron OR cameroun OR "central african republic" OR "ubangi shari" OR chad OR chile OR china OR colombia OR comoros OR "comoro islands" OR "iles comores" OR mayotte OR "democratic republic of the congo" OR "democratic republic congo" OR congo OR zaire OR "costa rica" OR "cote d'ivoire" OR "cote d'ivoire" OR "cote divoire" OR "cote d ivoire" OR "ivory coast" OR croatia OR cuba OR cyprus OR "czech republic" OR czechoslovakia OR djibouti OR "french somaliland" OR dominica OR "dominican republic" OR ecuador OR egypt OR "united arab republic" OR "el salvador" OR "equatorial guinea" OR "spanish guinea" OR eritrea OR estonia OR eswatini OR swaziland OR ethiopia OR fiji OR gabon OR "gabonese republic" OR gambia OR "georgia (republic)" OR georgian OR ghana OR "gold coast" OR gibraltar OR greece OR grenada OR guam OR guatemala OR guinea OR "guinea bissau" OR guyana OR "british guiana" OR haiti OR hispaniola OR honduras OR hungary OR india OR indonesia OR timor OR iran OR iraq OR "isle of man" OR jamaica OR jordan OR kazakhstan OR kazakh OR kenya OR "democratic people's republic of korea" OR "republic of korea" OR "north korea" OR "south korea" OR korea OR kosovo OR kyrgyzstan OR kirghizia OR kirgizstan OR "kyrgyz republic" OR kirghiz OR laos OR "lao pdr" OR "lao people's democratic republic" OR latvia OR lebanon OR "lebanese republic" OR lesotho OR basutoland OR liberia OR libya OR "libyan arab jamahiriya" OR lithuania OR macau OR macao OR "macedonia (republic)" OR macedonia OR madagascar OR "malagasy republic" OR malawi OR nyasaland OR malaysia OR "malay federation" OR "malaya federation" OR maldives OR "indian ocean islands" OR "indian ocean" OR mali OR malta OR micronesia OR "federated states of micronesia" OR kiribati OR "marshall islands" OR nauru OR "northern mariana islands" OR palau OR tuvalu OR mauritania OR mauritius OR mexico OR moldova OR moldovian OR mongolia OR montenegro OR morocco OR ifni OR mozambique OR "portuguese east africa" OR myanmar OR burma OR namibia OR nepal OR "netherlands antilles" OR nicaragua OR niger OR nigeria OR oman OR muscat OR pakistan OR panama OR "papua new guinea" OR "new guinea" OR paraguay OR peru OR philippines OR philippines OR philippines OR poland OR "polish people's republic" OR portugal OR "portuguese republic" OR "puerto rico" OR romania OR russia OR "russian federation" OR ussr OR "soviet union" OR "union of soviet socialist republics" OR rrwanda OR ruanda OR samoa OR "pacific islands" OR polynesia OR "samoan islands" OR "navigator island" OR "navigator islands" OR "sao tome and principe" OR "saudi arabia" OR senegal OR serbia OR seychelles OR "sierra leone" OR slovakia OR "slovak republic" OR slovenia OR melanesia OR "solomon island" OR "solomon islands" OR "norfolk island" OR "norfolk islands" OR somalia OR "south africa" OR "south sudan" OR "sri lanka" OR ceylon OR "saint kitts and nevis" OR "st. kitts and nevis" OR "saint lucia" OR "st. lucia" OR "saint vincent and the grenadines" OR "saint vincent" OR "st. vincent" OR grenadines OR sudan OR suriname OR surinam OR "dutch guiana" OR "netherlands guiana" OR syria OR "syrian arab republic" OR tajikistan OR tadjikistan OR tadjikistan OR tadjik OR tanzania OR

tanganyika OR thailand OR siam OR "timor leste" OR "east timor" OR togo OR "togolese republic" OR tonga OR "trinidad and tobago" OR trinidad OR tobago OR tunisia OR turkey OR "turkey (republic)" OR turkmenistan OR turkmen OR uganda OR ukraine OR uruguay OR uzbekistan OR uzbek OR vanuatu OR "new hebrides" OR venezuela OR vietnam OR "viet nam" OR "middle east" OR "west bank" OR gaza OR palestine OR yemen OR yugoslavia OR zambia OR zimbabwe OR "northern rhodesia" OR "global south" OR "africa south of the sahara" OR "sub-saharan africa" OR "subsaharan africa" OR "africa, central" OR "central africa" OR "africa, northern" OR "north africa" OR "northern africa" OR magreb OR maghrib OR sahara OR "africa, southern" OR "southern africa" OR "africa, eastern" OR "east africa" OR "eastern africa" OR "africa, western" OR "west africa" OR "western africa" OR "west indies" OR "indian ocean islands" OR caribbean OR "central america" OR "latin america" OR "south and central america" OR "south america" OR "asia, central" OR "central asia" OR "asia, northern" OR "north asia" OR "northern asia" OR "asia, southeastern" OR "southeastern asia" OR "south eastern asia" OR "southeast asia" OR "south east asia" OR "asia, western" OR "western asia" OR "europe, eastern" OR "east europe" OR "eastern europe" OR "developing country" OR "developing countries" OR "developing nation*" OR "developing population*" OR "developing world" OR "less developed countr*" OR "less developed nation*" OR "less developed population*" OR "less developed world" OR "lesser developed countr*" OR "lesser developed nation*" OR "lesser developed population*" OR "lesser developed world" OR "under developed countr*" OR "under developed nation*" OR "under developed population*" OR "under developed world" OR "underdeveloped countr*" OR "underdeveloped nation*" OR "underdeveloped population*" OR "underdeveloped world" OR "middle income countr*" OR "middle income nation*" OR "middle income population*" OR "low income countr*" OR "low income nation*" OR "low income population*" OR "lower income countr*" OR "lower income nation*" OR "lower income population*" OR "underserved countr*" OR "underserved nation*" OR "underserved population*" OR "underserved world" OR "under served countr*" OR "under served nation*" OR "under served population*" OR "under served world" OR "deprived countr*" OR "deprived nation*" OR "deprived population*" OR "deprived world" OR "poor countr*" OR "poor nation*" OR "poor population*" OR "poor world" OR "poorer countr*" OR "poorer nation*" OR "poorer population*" OR "poorer world" OR "developing econom*" OR "less developed econom*" OR "lesser developed econom*" OR "under developed econom*" OR "underdeveloped econom*" OR "middle income econom*" OR "low income econom*" OR "lower income econom*" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic" OR "lower gross national" OR Imic OR Imics OR "third world" OR "lami countr*" OR "transitional countr*" OR "emerging econom*" OR "emerging nation*")) OR SU (((afghanistan OR albania OR algeria OR "american samoa" OR angola OR "antigua and barbuda" OR antigua OR barbuda OR argentina OR armenia OR armenian OR aruba OR azerbaijan OR bahrain OR bangladesh OR barbados OR belarus OR byelarus OR belorussia OR byelorussian OR belize OR "british honduras" OR benin OR dahomey OR bhutan OR bolivia OR "bosnia and herzegovina" OR bosnia OR herzegovina OR botswana OR bechuanaland OR brazil OR brasil OR bulgaria OR "burkina faso" OR "burkina fasso" OR "upper volta" OR burundi OR urundi OR "cabo verde" OR "cape verde" OR cambodia OR kampuchea OR "khmer republic" OR cameroon OR cameron OR cameroun OR "central african republic" OR "ubangi shari" OR chad OR chile OR china OR colombia OR comoros OR "comoro islands" OR "iles comores" OR mayotte OR "democratic republic of the congo" OR "democratic republic congo" OR congo OR zaire OR "costa rica" OR "cote d'ivoire"

OR "cote d'ivoire" OR "cote divoire" OR "cote d ivoire" OR "ivory coast" OR croatia
OR cuba OR cyprus OR "czech republic" OR czechoslovakia OR djibouti OR "french
somaliland" OR dominica OR "dominican republic" OR ecuador OR egypt OR
"united arab republic" OR "el salvador" OR "equatorial guinea" OR "spanish guinea"
OR eritrea OR estonia OR eswatini OR swaziland OR ethiopia OR fiji OR gabon OR
"gabonese republic" OR gambia OR "georgia (republic)" OR georgian OR ghana OR
"gold coast" OR gibraltar OR greece OR grenada OR guam OR guatemala OR
guinea OR "guinea bissau" OR guyana OR "british guiana" OR haiti OR hispaniola
OR honduras OR hungary OR india OR indonesia OR timor OR iran OR iraq OR
"isle of man" OR jamaica OR jordan OR kazakhstan OR kazakh OR kenya OR
"democratic people's republic of korea" OR "republic of korea" OR "north korea" OR
"south korea" OR korea OR kosovo OR kyrgyzstan OR kirghizia OR kirgizstan OR
"kyrgyz republic" OR kirghiz OR laos OR "lao pdr" OR "lao people's democratic
republic" OR latvia OR lebanon OR "lebanese republic" OR lesotho OR basutoland
OR liberia OR libya OR "libyan arab jamahiriya" OR lithuania OR macau OR macao
OR "macedonia (republic)" OR macedonia OR madagascar OR "malagasy republic"
OR malawi OR nyasaland OR malaysia OR "malay federation" OR "malaya
federation" OR maldives OR "indian ocean islands" OR "indian ocean" OR mali OR
malta OR micronesia OR "federated states of micronesia" OR kiribati OR "marshall
islands" OR nauru OR "northern mariana islands" OR palau OR tuvalu OR
mauritania OR mauritius OR mexico OR moldova OR moldovian OR mongolia OR
montenegro OR morocco OR ifni OR mozambique OR "portuguese east africa" OR
myanmar OR burma OR namibia OR nepal OR "netherlands antilles" OR nicaragua
OR niger OR nigeria OR oman OR muscat OR pakistan OR panama OR "papua
new guinea" OR "new guinea" OR paraguay OR peru OR philippines OR philippines
OR philippines OR phillippines OR poland OR "polish people's republic" OR portugal
OR "portuguese republic" OR "puerto rico" OR romania OR russia OR "russian
federation" OR ussr OR "soviet union" OR "union of soviet socialist republics" OR
rwanda OR ruanda OR samoa OR "pacific islands" OR polynesia OR "samoan
islands" OR "navigator island" OR "navigator islands" OR "sao tome and principe"
OR "saudi arabia" OR senegal OR serbia OR seychelles OR "sierra leone" OR
slovakia OR "slovak republic" OR slovenia OR melanesia OR "solomon island" OR
"solomon islands" OR "norfolk island" OR "norfolk islands" OR somalia OR "south
africa" OR "south sudan" OR "sri lanka" OR ceylon OR "saint kitts and nevis" OR "st.
kitts and nevis" OR "saint lucia" OR "st. lucia" OR "saint vincent and the grenadines"
OR "saint vincent" OR "st. vincent" OR grenadines OR sudan OR suriname OR
surinam OR "dutch guiana" OR "netherlands guiana" OR syria OR "syrian arab
republic" OR tajikistan OR tadjikistan OR tadjhikistan OR tadjhik OR tanzania OR
tanganyika OR thailand OR siam OR "timor leste" OR "east timor" OR togo OR
"togolese republic" OR tonga OR "trinidad and tobago" OR trinidad OR tobago OR
tunisia OR turkey OR "turkey (republic)" OR turkmenistan OR turkmen OR uganda
OR ukraine OR uruguay OR uzbekistan OR uzbek OR vanuatu OR "new hebrides"
OR venezuela OR vietnam OR "viet nam" OR "middle east" OR "west bank" OR
gaza OR palestine OR yemen OR yugoslavia OR zambia OR zimbabwe OR
"northern rhodesia" OR "global south" OR "africa south of the sahara" OR "sub-
saharan africa" OR "subsaharan africa" OR "africa, central" OR "central africa" OR
"africa, northern" OR "north africa" OR "northern africa" OR magreb OR maghrib OR
sahara OR "africa, southern" OR "southern africa" OR "africa, eastern" OR "east
africa" OR "eastern africa" OR "africa, western" OR "west africa" OR "western africa"
OR "west indies" OR "indian ocean islands" OR caribbean OR "central america" OR
"latin america" OR "south and central america" OR "south america" OR "asia,
central" OR "central asia" OR "asia, northern" OR "north asia" OR "northern asia"

OR "asia, southeastern" OR "southeastern asia" OR "south eastern asia" OR "southeast asia" OR "south east asia" OR "asia, western" OR "western asia" OR "europe, eastern" OR "east europe" OR "eastern europe" OR "developing country" OR "developing countries" OR "developing nation*" OR "developing population*" OR "developing world" OR "less developed countr*" OR "less developed nation*" OR "less developed population*" OR "less developed world" OR "lesser developed countr*" OR "lesser developed nation*" OR "lesser developed population*" OR "lesser developed world" OR "under developed countr*" OR "under developed nation*" OR "under developed population*" OR "under developed world" OR "underdeveloped countr*" OR "underdeveloped nation*" OR "underdeveloped population*" OR "underdeveloped world" OR "middle income countr*" OR "middle income nation*" OR "middle income population*" OR "low income countr*" OR "low income nation*" OR "low income population*" OR "lower income countr*" OR "lower income nation*" OR "lower income population*" OR "underserved countr*" OR "underserved nation*" OR "underserved population*" OR "underserved world" OR "under served countr*" OR "under served nation*" OR "under served population*" OR "under served world" OR "deprived countr*" OR "deprived nation*" OR "deprived population*" OR "deprived world" OR "poor countr*" OR "poor nation*" OR "poor population*" OR "poor world" OR "poorer countr*" OR "poorer nation*" OR "poorer population*" OR "poorer world" OR "developing econom*" OR "less developed econom*" OR "lesser developed econom*" OR "under developed econom*" OR "underdeveloped econom*" OR "middle income econom*" OR "low income econom*" OR "lower income econom*" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic" OR "lower gross national" OR Imic OR Imics OR "third world" OR "lami countr*" OR "transitional countr*" OR "emerging econom*" OR "emerging nation*"))

2,070,077

CINAHL (Ebsco) – Searched 26th May 2020

- S17 S1 AND S12 AND S15 Limiters - Published Date: 20000101-20201231
4,950
- S16 S1 AND S12 AND S15
5,013
- S15 S13 OR S14
805,831
- S14 TI ("systematic review" or "literature review") OR AB ("systematic review" or "literature review") OR SU ("systematic review" or "literature review") OR SO (cochrane database of systematic reviews)
172,958
- S13 TI ((random* or experiment* or (match* N2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV N2 (estimation or approach)) or regression discontinuity or time series or segment* regression or (non N2 participant*) or ((control or comparison) N2 (group* or condition* or area* or intervention)))) OR AB ((random* or experiment* or (match* N2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or

"differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV N2 (estimation or approach)) or regression discontinuity or time series or segment* regression or (non N2 participant*) or ((control or comparison) N2 (group* or condition* or area* or intervention)))) OR SU ((random* or experiment* or (match* N2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV N2 (estimation or approach)) or regression discontinuity or time series or segment* regression or (non N2 participant*) or ((control or comparison) N2 (group* or condition* or area* or intervention))))

681,035

S12 S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11
105,614

S11 TI (("farm* field school*" or (farm* N3 (train* or (build N3 capacity)))) or "demonstration plot*" or ((agricultur* or rural) N1 extension) or (farm* N3 educat*) or (farm* N3 (organi?ation* or group* or cooperative* or co-op* or club*)) or (("social protection" or microfinance or "micro finance" or microloan* or "micro loan*") N4 (farm* or smallholder* or agricultur*))) OR SU(("farm* field school*" or (farm* N3 (train* or (build N3 capacity)))) or "demonstration plot*" or ((agricultur* or rural) N1 extension) or (farm* N3 educat*) or (farm* N3 (organi?ation* or group* or cooperative* or co-op* or club*)) or (("social protection" or microfinance or "micro finance" or microloan* or "micro loan*") N4 (farm* or smallholder* or agricultur*)))

195

S10 TI ((cook* or ((meal* or food*) N3 prepar*) or (wom?n N4 (food* or eat* or feed* or meal* or diet*) N4 (empower* or deci*)) or ((food* or eat* or feed* or breastfeed* or "breast feed*" or meal* or diet* or "F&V") N4 (inform* or educat* or promot* or campaign* or media or initiative* or (peer W1 (counsel* or support)) or (community N3 (meet* or class* or engag* or participat*)) or "door-to-door")))) OR SU((cook* or ((meal* or food*) N3 prepar*) or (wom?n N4 (food* or eat* or feed* or meal* or diet*) N4 (empower* or deci*)) or ((food* or eat* or feed* or breastfeed* or "breast feed*" or meal* or diet* or "F&V") N4 (inform* or educat* or promot* or campaign* or media or initiative* or (peer W1 (counsel* or support)) or (community N3 (meet* or class* or engag* or participat*)) or "door-to-door"))))

23,115

S9 TI ((((food* N3 (safe* or quality)) N3 (regulat* or restrict* or polic* or law* or legislat* or inspect*)) or (food* N3 certif*))) OR SU((((food* N3 (safe* or quality)) N3 (regulat* or restrict* or polic* or law* or legislat* or inspect*)) or (food* N3 certif*))

155

S8 TI (((food* N4 ((advertis* or label* or market*) N3 (ban* or restrict* or regulat* or polic* or law* or legislat*))) or ((supermarket or ((food* or grocer* or convenience or corner) W1 (store* or market*))) N4 (design* or redesign* or re-design* or layout* or innovat*)) or (front N3 pack* N3 label*))) OR SU(((food* N4 ((advertis* or label* or market*) N3 (ban* or restrict* or regulat* or polic* or law* or legislat*))) or ((supermarket or ((food* or grocer* or convenience or corner) W1 (store* or market*))) N4 (design* or redesign* or re-design* or layout* or innovat*)) or (front N3 pack* N3 label*)))

720

S7 TI ((((food* or consumer*) N4 (subsid* or "price control*")) or (food* N4 (cash or "social assistance" or "social safety net" or voucher* or welfare)))) OR SU((((food* or consumer*) N4 (subsid* or "price control*")) or (food* N4 (cash or "social assistance" or "social safety net" or voucher* or welfare))))

88

S6 TI (("food environment*" or (zoning and (food* N3 (security or access*))) or ((sugar* or SSB or "unhealthy food*") N3 tax*) or nudg* or ((food* or eat* or feed* or meal* or diet*) N4 (deci* or ((cultur* or social) N3 (norm* or preferen*)))) or "ration shop*" or "farmer* market*" or "food desert*" or ((food or grocer*) N3 retail* N3 (tax* or subsid* or incentiv*)) or (school* N4 (meal* or feed* or food* or lunch*)))) OR SU(("food environment*" or (zoning and (food* N3 (security or access*))) or ((sugar* or SSB or "unhealthy food*") N3 tax*) or nudg* or ((food* or eat* or feed* or meal* or diet*) N4 (deci* or ((cultur* or social) N3 (norm* or preferen*)))) or "ration shop*" or "farmer* market*" or "food desert*" or ((food or grocer*) N3 retail* N3 (tax* or subsid* or incentiv*)) or (school* N4 (meal* or feed* or food* or lunch*))))

3,439

S5 TI (((food N3 (loss* or wast*)) or ((food* or grocer* or soup) N4 (donat* or pantr* or bank* or kitchen* or transfer*)) or (food* N4 near* N4 spoil*))) OR SU(((food N3 (loss* or wast*)) or ((food* or grocer* or soup) N4 (donat* or pantr* or bank* or kitchen* or transfer*)) or (food* N4 near* N4 spoil*)))

569

S4 TI ((((food* or crop* or staple*) N3 (fortif* or biofortif*)) or ((recycl* or compost* or biodegrad* or plastic*) N3 (pack* or sache*)) or (post-harvest N4 (clean* or winnow* or cann* or mill* or thresh* or hull*)) or ((food* or crop* or grain*) N3 dry*))) OR SU((((food* or crop* or staple*) N3 (fortif* or biofortif*)) or ((recycl* or compost* or biodegrad* or plastic*) N3 (pack* or sache*)) or (post-harvest N4 (clean* or winnow* or cann* or mill* or thresh* or hull*)) or ((food* or crop* or grain*) N3 dry*)))

4,226

S3 TI ((((grain* or crop* or agricultur* or farm* or produce) N4 (silo* or stor* or shed* or warehous*)) or ((agricultur* or farm*) N3 (collection or distribution) N3 (centre* or center* or point* or hub*)) or ((farm* or produce or food* or agricultur*) N4 ("cold chain*" or ((refrigerat* or cold) N3 (truck* or transport* or transit)))) or ((import or imports or importation or export*) N4 (tariff* or quota* or ban* or restrict* or regulat*)) or "trade agreement*")) OR SU((((grain* or crop* or agricultur* or farm* or produce) N4 (silo* or stor* or shed* or warehous*)) or ((agricultur* or farm*) N3 (collection or distribution) N3 (centre* or center* or point* or hub*)) or ((farm* or produce or food* or agricultur*) N4 ("cold chain*" or ((refrigerat* or cold) N3 (truck* or transport* or transit)))) or ((import or imports or importation or export*) N4 (tariff* or quota* or ban* or restrict* or regulat*)) or "trade agreement*"))

166

S2 TI (((Food N3 (system or produc*)) or (agricultur* N3 produc*) or aquacultur* or fisher* or livestock* or ((kitchen or home*) N3 (farm* or garden*)) or "nutrition-sensitive" or (improv* N3 (seed* or variet* or crop*)) or (genetic* N3 modif* N3 (food* or organism*)) or GMO* or ((compost* or manure* or mulch* or fertili* or pesticid* or insecticid*) N3 (appl* or spray* or spread* or use or usage)) or ((drought* or pest* or insect*) N3 (toleran* or resist*)) or (rotat* N3 crop*) or (land N3 manage*) or "fixed distance planting" or (plant* N3 (row or rows*)) or ((farm* or crop or agricultur*) N4 subsid*) or (price* N4 purchas* N4 guarantee*) or ((agricultur* or crop* or rain* or weather or index) N4 insurance) or (irrigat* N4 (project* or program* or access* or improv*)) or "water meter*" or (rain* N3 (fed or feed*)) or (trench* N3 hill*) or hilling or "contour bund*" or zai or "water break" or terrac* or ((farm* or agricultur*) N3

(mechanis?e* or mechanis?ation*) or intercrop* or (companion N3 (plant* or variet* or species)) or "integrated soil fertility management" or ISFM or (pest N3 manag*)) OR SU(((Food N3 (system or produc*) or (agricultur* N3 produc*) or aquacultur* or fisher* or livestock* or ((kitchen or home*) N3 (farm* or garden*)) or "nutrition-sensitive" or (improv* N3 (seed* or variet* or crop*)) or (genetic* N3 modif* N3 (food* or organism*)) or GMO* or ((compost* or manure* or mulch* or fertili* or pesticid* or insecticid*) N3 (appl* or spray* or spread* or use or usage)) or ((drought* or pest* or insect*) N3 (toleran* or resist*)) or (rotat* N3 crop*) or (land N3 manage*) or "fixed distance planting" or (plant* N3 (row or rows*)) or ((farm* or crop or agricultur*) N4 subsid*) or (price* N4 purchas* N4 guarantee*) or ((agricultur* or crop* or rain* or weather or index) N4 insurance) or (irrigat* N4 (project* or program* or access* or improv*)) or "water meter*" or (rain* N3 (fed or feed*)) or (trench* N3 hill*) or hilling or "contour bund*" or zai or "water break" or terrac* or ((farm* or agricultur*) N3 (mechanis?e* or mechanis?ation*)) or intercrop* or (companion N3 (plant* or variet* or species)) or "integrated soil fertility management" or ISFM or (pest N3 manag*))

74,091

S1 TI ((afghanistan OR albania OR algeria OR "american samoa" OR angola OR "antigua and barbuda" OR antigua OR barbuda OR argentina OR armenia OR armenian OR aruba OR azerbaijan OR bahrain OR bangladesh OR barbados OR belarus OR byelarus OR belorussia OR byelorussian OR belize OR "british honduras" OR benin OR dahomey OR bhutan OR bolivia OR "bosnia and herzegovina" OR bosnia OR herzegovina OR botswana OR bechuanaland OR brazil OR brasil OR bulgaria OR "burkina faso" OR "burkina fasso" OR "upper volta" OR burundi OR urundi OR "cabo verde" OR "cape verde" OR cambodia OR kampuchea OR "khmer republic" OR cameroon OR cameron OR cameroun OR "central african republic" OR "ubangi shari" OR chad OR chile OR china OR colombia OR comoros OR "comoro islands" OR "iles comores" OR mayotte OR "democratic republic of the congo" OR "democratic republic congo" OR congo OR zaire OR "costa rica" OR "cote d'ivoire" OR "cote d'ivoire" OR "cote divoire" OR "cote d ivoire" OR "ivory coast" OR croatia OR cuba OR cyprus OR "czech republic" OR czechoslovakia OR djibouti OR "french somaliland" OR dominica OR "dominican republic" OR ecuador OR egypt OR "united arab republic" OR "el salvador" OR "equatorial guinea" OR "spanish guinea" OR eritrea OR estonia OR eswatini OR swaziland OR ethiopia OR fiji OR gabon OR "gabonese republic" OR gambia OR "georgia (republic)" OR georgian OR ghana OR "gold coast" OR gibraltar OR greece OR grenada OR guam OR guatemala OR guinea OR "guinea bissau" OR guyana OR "british guiana" OR haiti OR hispaniola OR honduras OR hungary OR india OR indonesia OR timor OR iran OR iraq OR "isle of man" OR jamaica OR jordan OR kazakhstan OR kazakh OR kenya OR "democratic people's republic of korea" OR "republic of korea" OR "north korea" OR "south korea" OR korea OR kosovo OR kyrgyzstan OR kirghizia OR kirgizstan OR "kyrgyz republic" OR kirghiz OR laos OR "lao pdr" OR "lao people's democratic republic" OR latvia OR lebanon OR "lebanese republic" OR lesotho OR basutoland OR liberia OR libya OR "libyan arab jamahiriya" OR lithuania OR macau OR macao OR "macedonia (republic)" OR macedonia OR madagascar OR "malagasy republic" OR malawi OR nyasaland OR malaysia OR "malay federation" OR "malaya federation" OR maldives OR "indian ocean islands" OR "indian ocean" OR mali OR malta OR micronesia OR "federated states of micronesia" OR kiribati OR "marshall islands" OR nauru OR "northern mariana islands" OR palau OR tuvalu OR mauritania OR mauritius OR mexico OR moldova OR moldovian OR mongolia OR montenegro OR morocco OR ifni OR mozambique OR "portuguese east africa" OR myanmar OR burma OR namibia OR nepal OR "netherlands antilles" OR nicaragua OR niger OR nigeria OR oman OR muscat OR pakistan OR panama OR

"papua new guinea" OR "new guinea" OR paraguay OR peru OR philippines OR philipines OR phillipines OR philippines OR poland OR "polish people's republic" OR portugal OR "portuguese republic" OR "puerto rico" OR romania OR russia OR "russian federation" OR ussr OR "soviet union" OR "union of soviet socialist republics" OR rwnda OR ruanda OR samoa OR "pacific islands" OR polynesia OR "samoan islands" OR "navigator island" OR "navigator islands" OR "sao tome and principe" OR "saudi arabia" OR senegal OR serbia OR seychelles OR "sierra leone" OR slovakia OR "slovak republic" OR slovenia OR melanesia OR "solomon island" OR "solomon islands" OR "norfolk island" OR "norfolk islands" OR somalia OR "south africa" OR "south sudan" OR "sri lanka" OR ceylon OR "saint kitts and nevis" OR "st. kitts and nevis" OR "saint lucia" OR "st. lucia" OR "saint vincent and the grenadines" OR "saint vincent" OR "st. vincent" OR grenadines OR sudan OR suriname OR surinam OR "dutch guiana" OR "netherlands guiana" OR syria OR "syrian arab republic" OR tajikistan OR tadjikistan OR tadhikistan OR tadhik OR tanzania OR tanganyika OR thailand OR siam OR "timor leste" OR "east timor" OR togo OR "togolese republic" OR tonga OR "trinidad and tobago" OR trinidad OR tobago OR tunisia OR turkey OR "turkey (republic)" OR turkmenistan OR turkmen OR uganda OR ukraine OR uruguay OR uzbekistan OR uzbek OR vanuatu OR "new hebrides" OR venezuela OR vietnam OR "viet nam" OR "middle east" OR "west bank" OR gaza OR palestine OR yemen OR yugoslavia OR zambia OR zimbabwe OR "northern rhodesia" OR "global south" OR "africa south of the sahara" OR "sub-saharan africa" OR "subsaharan africa" OR "africa, central" OR "central africa" OR "africa, northern" OR "north africa" OR "northern africa" OR magreb OR maghrib OR sahara OR "africa, southern" OR "southern africa" OR "africa, eastern" OR "east africa" OR "eastern africa" OR "africa, western" OR "west africa" OR "western africa" OR "west indies" OR "indian ocean islands" OR caribbean OR "central america" OR "latin america" OR "south and central america" OR "south america" OR "asia, central" OR "central asia" OR "asia, northern" OR "north asia" OR "northern asia" OR "asia, southeastern" OR "southeastern asia" OR "south eastern asia" OR "southeast asia" OR "south east asia" OR "asia, western" OR "western asia" OR "europe, eastern" OR "east europe" OR "eastern europe" OR "developing country" OR "developing countries" OR "developing nation*" OR "developing population*" OR "developing world" OR "less developed countr*" OR "less developed nation*" OR "less developed population*" OR "less developed world" OR "lesser developed countr*" OR "lesser developed nation*" OR "lesser developed population*" OR "lesser developed world" OR "under developed countr*" OR "under developed nation*" OR "under developed population*" OR "under developed world" OR "underdeveloped countr*" OR "underdeveloped nation*" OR "underdeveloped population*" OR "underdeveloped world" OR "middle income countr*" OR "middle income nation*" OR "middle income population*" OR "low income countr*" OR "low income nation*" OR "low income population*" OR "lower income countr*" OR "lower income nation*" OR "lower income population*" OR "underserved countr*" OR "underserved nation*" OR "underserved population*" OR "underserved world" OR "under served countr*" OR "under served nation*" OR "under served population*" OR "under served world" OR "deprived countr*" OR "deprived nation*" OR "deprived population*" OR "deprived world" OR "poor countr*" OR "poor nation*" OR "poor population*" OR "poor world" OR "poorer countr*" OR "poorer nation*" OR "poorer population*" OR "poorer world" OR "developing econom*" OR "less developed econom*" OR "lesser developed econom*" OR "under developed econom*" OR "underdeveloped econom*" OR "middle income econom*" OR "low income econom*" OR "lower income econom*" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic"

OR "lower gross national" OR Imic OR Imics OR "third world" OR "lami countr*" OR "transitional countr*" OR "emerging econom*" OR "emerging nation*"))) OR AB (((afghanistan OR albania OR algeria OR "american samoa" OR angola OR "antigua and barbuda" OR antigua OR barbuda OR argentina OR armenia OR armenian OR aruba OR azerbaijan OR bahrain OR bangladesh OR barbados OR belarus OR byelarus OR belorussia OR byelorussian OR belize OR "british honduras" OR benin OR dahomey OR bhutan OR bolivia OR "bosnia and herzegovina" OR bosnia OR herzegovina OR botswana OR bechuanaland OR brazil OR brasil OR bulgaria OR "burkina faso" OR "burkina fasso" OR "upper volta" OR burundi OR urundi OR "cabo verde" OR "cape verde" OR cambodia OR kampuchea OR "khmer republic" OR cameroon OR cameron OR cameroun OR "central african republic" OR "ubangi shari" OR chad OR chile OR china OR colombia OR comoros OR "comoro islands" OR "iles comores" OR mayotte OR "democratic republic of the congo" OR "democratic republic congo" OR congo OR zaire OR "costa rica" OR "cote d'ivoire" OR "cote d'ivoire" OR "cote divoire" OR "cote d ivoire" OR "ivory coast" OR croatia OR cuba OR cyprus OR "czech republic" OR czechoslovakia OR djibouti OR "french somaliland" OR dominica OR "dominican republic" OR ecuador OR egypt OR "united arab republic" OR "el salvador" OR "equatorial guinea" OR "spanish guinea" OR eritrea OR estonia OR eswatini OR swaziland OR ethiopia OR fiji OR gabon OR "gabonese republic" OR gambia OR "georgia (republic)" OR georgian OR ghana OR "gold coast" OR gibraltar OR greece OR grenada OR guam OR guatemala OR guinea OR "guinea bissau" OR guyana OR "british guiana" OR haiti OR hispaniola OR honduras OR hungary OR india OR indonesia OR timor OR iran OR iraq OR "isle of man" OR jamaica OR jordan OR kazakhstan OR kazakh OR kenya OR "democratic people's republic of korea" OR "republic of korea" OR "north korea" OR "south korea" OR korea OR kosovo OR kyrgyzstan OR kirghizia OR kirgizstan OR "kyrgyz republic" OR kirghiz OR laos OR "lao pdr" OR "lao people's democratic republic" OR latvia OR lebanon OR "lebanese republic" OR lesotho OR basutoland OR liberia OR libya OR "libyan arab jamahiriya" OR lithuania OR macau OR macao OR "macedonia (republic)" OR macedonia OR madagascar OR "malagasy republic" OR malawi OR nyasaland OR malaysia OR "malay federation" OR "malaya federation" OR maldives OR "indian ocean islands" OR "indian ocean" OR mali OR malta OR micronesia OR "federated states of micronesia" OR kiribati OR "marshall islands" OR nauru OR "northern mariana islands" OR palau OR tuvalu OR mauritania OR mauritius OR mexico OR moldova OR moldovian OR mongolia OR montenegro OR morocco OR ifni OR mozambique OR "portuguese east africa" OR myanmar OR burma OR namibia OR nepal OR "netherlands antilles" OR nicaragua OR niger OR nigeria OR oman OR muscat OR pakistan OR panama OR "papua new guinea" OR "new guinea" OR paraguay OR peru OR philippines OR philippines OR philippines OR philippines OR poland OR "polish people's republic" OR portugal OR "portuguese republic" OR "puerto rico" OR romania OR russia OR "russian federation" OR ussr OR "soviet union" OR "union of soviet socialist republics" OR rrwanda OR ruanda OR samoa OR "pacific islands" OR polynesia OR "samoan islands" OR "navigator island" OR "navigator islands" OR "sao tome and principe" OR "saudi arabia" OR senegal OR serbia OR seychelles OR "sierra leone" OR slovakia OR "slovak republic" OR slovenia OR melanesia OR "solomon island" OR "solomon islands" OR "norfolk island" OR "norfolk islands" OR somalia OR "south africa" OR "south sudan" OR "sri lanka" OR ceylon OR "saint kitts and nevis" OR "st. kitts and nevis" OR "saint lucia" OR "st. lucia" OR "saint vincent and the grenadines" OR "saint vincent" OR "st. vincent" OR grenadines OR sudan OR suriname OR surinam OR "dutch guiana" OR "netherlands guiana" OR syria OR "syrian arab republic" OR tajikistan OR tadjikistan OR tadjikistan OR tadjik OR tanzania OR

tanganyika OR thailand OR siam OR "timor leste" OR "east timor" OR togo OR "togolese republic" OR tonga OR "trinidad and tobago" OR trinidad OR tobago OR tunisia OR turkey OR "turkey (republic)" OR turkmenistan OR turkmen OR uganda OR ukraine OR uruguay OR uzbekistan OR uzbek OR vanuatu OR "new hebrides" OR venezuela OR vietnam OR "viet nam" OR "middle east" OR "west bank" OR gaza OR palestine OR yemen OR yugoslavia OR zambia OR zimbabwe OR "northern rhodesia" OR "global south" OR "africa south of the sahara" OR "sub-saharan africa" OR "subsaharan africa" OR "africa, central" OR "central africa" OR "africa, northern" OR "north africa" OR "northern africa" OR magreb OR maghrib OR sahara OR "africa, southern" OR "southern africa" OR "africa, eastern" OR "east africa" OR "eastern africa" OR "africa, western" OR "west africa" OR "western africa" OR "west indies" OR "indian ocean islands" OR caribbean OR "central america" OR "latin america" OR "south and central america" OR "south america" OR "asia, central" OR "central asia" OR "asia, northern" OR "north asia" OR "northern asia" OR "asia, southeastern" OR "southeastern asia" OR "south eastern asia" OR "southeast asia" OR "south east asia" OR "asia, western" OR "western asia" OR "europe, eastern" OR "east europe" OR "eastern europe" OR "developing country" OR "developing countries" OR "developing nation*" OR "developing population*" OR "developing world" OR "less developed countr*" OR "less developed nation*" OR "less developed population*" OR "less developed world" OR "lesser developed countr*" OR "lesser developed nation*" OR "lesser developed population*" OR "lesser developed world" OR "under developed countr*" OR "under developed nation*" OR "under developed population*" OR "under developed world" OR "underdeveloped countr*" OR "underdeveloped nation*" OR "underdeveloped population*" OR "underdeveloped world" OR "middle income countr*" OR "middle income nation*" OR "middle income population*" OR "low income countr*" OR "low income nation*" OR "low income population*" OR "lower income countr*" OR "lower income nation*" OR "lower income population*" OR "underserved countr*" OR "underserved nation*" OR "underserved population*" OR "underserved world" OR "under served countr*" OR "under served nation*" OR "under served population*" OR "under served world" OR "deprived countr*" OR "deprived nation*" OR "deprived population*" OR "deprived world" OR "poor countr*" OR "poor nation*" OR "poor population*" OR "poor world" OR "poorer countr*" OR "poorer nation*" OR "poorer population*" OR "poorer world" OR "developing econom*" OR "less developed econom*" OR "lesser developed econom*" OR "under developed econom*" OR "underdeveloped econom*" OR "middle income econom*" OR "low income econom*" OR "lower income econom*" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic" OR "lower gross national" OR Imic OR Imics OR "third world" OR "lami countr*" OR "transitional countr*" OR "emerging econom*" OR "emerging nation*")) OR SU (((afghanistan OR albania OR algeria OR "american samoa" OR angola OR "antigua and barbuda" OR antigua OR barbuda OR argentina OR armenia OR armenian OR aruba OR azerbaijan OR bahrain OR bangladesh OR barbados OR belarus OR byelarus OR belorussia OR byelorussian OR belize OR "british honduras" OR benin OR dahomey OR bhutan OR bolivia OR "bosnia and herzegovina" OR bosnia OR herzegovina OR botswana OR bechuanaland OR brazil OR brasil OR bulgaria OR "burkina faso" OR "burkina fasso" OR "upper volta" OR burundi OR urundi OR "cabo verde" OR "cape verde" OR cambodia OR kampuchea OR "khmer republic" OR cameroon OR cameron OR cameroun OR "central african republic" OR "ubangi shari" OR chad OR chile OR china OR colombia OR comoros OR "comoro islands" OR "iles comores" OR mayotte OR "democratic republic of the congo" OR "democratic republic congo" OR congo OR zaire OR "costa rica" OR "cote d'ivoire"

OR "cote d'ivoire" OR "cote divoire" OR "cote d ivoire" OR "ivory coast" OR croatia
OR cuba OR cyprus OR "czech republic" OR czechoslovakia OR djibouti OR "french
somaliland" OR dominica OR "dominican republic" OR ecuador OR egypt OR
"united arab republic" OR "el salvador" OR "equatorial guinea" OR "spanish guinea"
OR eritrea OR estonia OR eswatini OR swaziland OR ethiopia OR fiji OR gabon OR
"gabonese republic" OR gambia OR "georgia (republic)" OR georgian OR ghana OR
"gold coast" OR gibraltar OR greece OR grenada OR guam OR guatemala OR
guinea OR "guinea bissau" OR guyana OR "british guiana" OR haiti OR hispaniola
OR honduras OR hungary OR india OR indonesia OR timor OR iran OR iraq OR
"isle of man" OR jamaica OR jordan OR kazakhstan OR kazakh OR kenya OR
"democratic people's republic of korea" OR "republic of korea" OR "north korea" OR
"south korea" OR korea OR kosovo OR kyrgyzstan OR kirghizia OR kirgizstan OR
"kyrgyz republic" OR kirghiz OR laos OR "lao pdr" OR "lao people's democratic
republic" OR latvia OR lebanon OR "lebanese republic" OR lesotho OR basutoland
OR liberia OR libya OR "libyan arab jamahiriya" OR lithuania OR macau OR macao
OR "macedonia (republic)" OR macedonia OR madagascar OR "malagasy republic"
OR malawi OR niasaland OR malaysia OR "malay federation" OR "malaya
federation" OR maldives OR "indian ocean islands" OR "indian ocean" OR mali OR
malta OR micronesia OR "federated states of micronesia" OR kiribati OR "marshall
islands" OR nauru OR "northern mariana islands" OR palau OR tuvalu OR
mauritania OR mauritius OR mexico OR moldova OR moldovian OR mongolia OR
montenegro OR morocco OR ifni OR mozambique OR "portuguese east africa" OR
myanmar OR burma OR namibia OR nepal OR "netherlands antilles" OR nicaragua
OR niger OR nigeria OR oman OR muscat OR pakistan OR panama OR "papua
new guinea" OR "new guinea" OR paraguay OR peru OR philippines OR philippines
OR philippines OR phillippines OR poland OR "polish people's republic" OR portugal
OR "portuguese republic" OR "puerto rico" OR romania OR russia OR "russian
federation" OR ussr OR "soviet union" OR "union of soviet socialist republics" OR
rwanda OR ruanda OR samoa OR "pacific islands" OR polynesia OR "samoan
islands" OR "navigator island" OR "navigator islands" OR "sao tome and principe"
OR "saudi arabia" OR senegal OR serbia OR seychelles OR "sierra leone" OR
slovakia OR "slovak republic" OR slovenia OR melanesia OR "solomon island" OR
"solomon islands" OR "norfolk island" OR "norfolk islands" OR somalia OR "south
africa" OR "south sudan" OR "sri lanka" OR ceylon OR "saint kitts and nevis" OR "st.
kitts and nevis" OR "saint lucia" OR "st. lucia" OR "saint vincent and the grenadines"
OR "saint vincent" OR "st. vincent" OR grenadines OR sudan OR suriname OR
surinam OR "dutch guiana" OR "netherlands guiana" OR syria OR "syrian arab
republic" OR tajikistan OR tadjikistan OR tadjhikistan OR tadjhik OR tanzania OR
tanganyika OR thailand OR siam OR "timor leste" OR "east timor" OR togo OR
"togolese republic" OR tonga OR "trinidad and tobago" OR trinidad OR tobago OR
tunisia OR turkey OR "turkey (republic)" OR turkmenistan OR turkmen OR uganda
OR ukraine OR uruguay OR uzbekistan OR uzbek OR vanuatu OR "new hebrides"
OR venezuela OR vietnam OR "viet nam" OR "middle east" OR "west bank" OR
gaza OR palestine OR yemen OR yugoslavia OR zambia OR zimbabwe OR
"northern rhodesia" OR "global south" OR "africa south of the sahara" OR "sub-
saharan africa" OR "subsaharan africa" OR "africa, central" OR "central africa" OR
"africa, northern" OR "north africa" OR "northern africa" OR magreb OR maghrib OR
sahara OR "africa, southern" OR "southern africa" OR "africa, eastern" OR "east
africa" OR "eastern africa" OR "africa, western" OR "west africa" OR "western africa"
OR "west indies" OR "indian ocean islands" OR caribbean OR "central america" OR
"latin america" OR "south and central america" OR "south america" OR "asia,
central" OR "central asia" OR "asia, northern" OR "north asia" OR "northern asia"

OR "asia, southeastern" OR "southeastern asia" OR "south eastern asia" OR "southeast asia" OR "south east asia" OR "asia, western" OR "western asia" OR "europe, eastern" OR "east europe" OR "eastern europe" OR "developing country" OR "developing countries" OR "developing nation*" OR "developing population*" OR "developing world" OR "less developed countr*" OR "less developed nation*" OR "less developed population*" OR "less developed world" OR "lesser developed countr*" OR "lesser developed nation*" OR "lesser developed population*" OR "lesser developed world" OR "under developed countr*" OR "under developed nation*" OR "under developed population*" OR "under developed world" OR "underdeveloped countr*" OR "underdeveloped nation*" OR "underdeveloped population*" OR "underdeveloped world" OR "middle income countr*" OR "middle income nation*" OR "middle income population*" OR "low income countr*" OR "low income nation*" OR "low income population*" OR "lower income countr*" OR "lower income nation*" OR "lower income population*" OR "underserved countr*" OR "underserved nation*" OR "underserved population*" OR "underserved world" OR "under served countr*" OR "under served nation*" OR "under served population*" OR "under served world" OR "deprived countr*" OR "deprived nation*" OR "deprived population*" OR "deprived world" OR "poor countr*" OR "poor nation*" OR "poor population*" OR "poor world" OR "poorer countr*" OR "poorer nation*" OR "poorer population*" OR "poorer world" OR "developing econom*" OR "less developed econom*" OR "lesser developed econom*" OR "under developed econom*" OR "underdeveloped econom*" OR "middle income econom*" OR "low income econom*" OR "lower income econom*" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic" OR "lower gross national" OR "lami countr*" OR "lami countr*" OR "transitional countr*" OR "emerging econom*" OR "emerging nation*"))

543,093

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Results limited to Academic Search Complete – 8361; Agris – 9818; Repec – 1570; World Bank e-lib – 60; Oxfam Policy & Practice - 8

S17 S1 AND S12 AND S15 Limiters - Date of Publication: 20000101-20201231
196,305

S16 S1 AND S12 AND S15
207,276

S15 S13 OR S14
27,915,113

S14 TI (("systematic review" or "literature review")) OR AB (("systematic review" or "literature review")) OR SU (("systematic review" or "literature review")) OR SO (cochrane database of systematic reviews)
1,585,841

S13 TI ((random* or experiment* or (match* N2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV N2 (estimation or approach)) or regression discontinuity or time series or segment* regression or (non N2 participant*) or ((control or comparison) N2 (group* or condition* or area* or intervention)))) OR AB ((random* or experiment* or (match* N2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or

"differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV N2 (estimation or approach)) or regression discontinuity or time series or segment* regression or (non N2 participant*) or ((control or comparison) N2 (group* or condition* or area* or intervention)))) OR SU ((random* or experiment* or (match* N2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV N2 (estimation or approach)) or regression discontinuity or time series or segment* regression or (non N2 participant*) or ((control or comparison) N2 (group* or condition* or area* or intervention))))

26,862,458

S12 S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11
2,361,321

S11 TI (("farm* field school*" or (farm* N3 (train* or (build N3 capacity))) or "demonstration plot*" or ((agricultur* or rural) N1 extension) or (farm* N3 educat*) or (farm* N3 (organi?ation* or group* or cooperative* or co-op* or club*)) or (("social protection" or microfinance or "micro finance" or microloan* or "micro loan*") N4 (farm* or smallholder* or agricultur*))) OR SU(("farm* field school*" or (farm* N3 (train* or (build N3 capacity))) or "demonstration plot*" or ((agricultur* or rural) N1 extension) or (farm* N3 educat*) or (farm* N3 (organi?ation* or group* or cooperative* or co-op* or club*)) or (("social protection" or microfinance or "micro finance" or microloan* or "micro loan*") N4 (farm* or smallholder* or agricultur*))))

78,036

S10 TI ((cook* or ((meal* or food*) N3 prepar*) or (wom?n N4 (food* or eat* or feed* or meal* or diet*) N4 (empower* or deci*)) or ((food* or eat* or feed* or breastfeed* or "breast feed*" or meal* or diet* or "F&V") N4 (inform* or educat* or promot* or campaign* or media or initiative* or (peer N1 (counsel* or support)) or (community N3 (meet* or class* or engag* or participat*)) or "door-to-door")))) OR SU((cook* or ((meal* or food*) N3 prepar*) or (wom?n N4 (food* or eat* or feed* or meal* or diet*) N4 (empower* or deci*)) or ((food* or eat* or feed* or breastfeed* or "breast feed*" or meal* or diet* or "F&V") N4 (inform* or educat* or promot* or campaign* or media or initiative* or (peer N1 (counsel* or support)) or (community N3 (meet* or class* or engag* or participat*)) or "door-to-door"))))

681,386

S9 TI ((((food* N3 (safe* or quality)) N3 (regulat* or restrict* or polic* or law* or legislat* or inspect*)) or (food* N3 certif*))) OR SU((((food* N3 (safe* or quality)) N3 (regulat* or restrict* or polic* or law* or legislat* or inspect*)) or (food* N3 certif*))

10,462

S8 TI (((food* N4 ((advertis* or label* or market*) N3 (ban* or restrict* or regulat* or polic* or law* or legislat*))) or ((supermarket or ((food* or grocer* or convenience or corner) N1 (store* or market*))) N4 (design* or redesign* or re-design* or layout* or innovat*)) or (front N3 pack* N3 label*))) OR SU(((food* N4 ((advertis* or label* or market*) N3 (ban* or restrict* or regulat* or polic* or law* or legislat*))) or ((supermarket or ((food* or grocer* or convenience or corner) N1 (store* or market*))) N4 (design* or redesign* or re-design* or layout* or innovat*)) or (front N3 pack* N3 label*)))

8,223

S7 TI ((((food* or consumer*) N4 (subsid* or "price control*")) or (food* N4 (cash or "social assistance" or "social safety net" or voucher* or welfare)))) OR SU((((food* or consumer*) N4 (subsid* or "price control*")) or (food* N4 (cash or "social assistance" or "social safety net" or voucher* or welfare))))

7,733

S6 TI (("food environment*" or (zoning and (food* N3 (security or access*))) or ((sugar* or SSB or "unhealthy food*") N3 tax*) or nudg* or ((food* or eat* or feed* or meal* or diet*) N4 (deci* or ((cultur* or social) N3 (norm* or preferen*)))) or "ration shop*" or "farmer* market*" or "food desert*" or ((food or grocer*) N3 retail* N3 (tax* or subsid* or incentiv*)) or (school* N4 (meal* or feed* or food* or lunch*)))) OR SU(("food environment*" or (zoning and (food* N3 (security or access*))) or ((sugar* or SSB or "unhealthy food*") N3 tax*) or nudg* or ((food* or eat* or feed* or meal* or diet*) N4 (deci* or ((cultur* or social) N3 (norm* or preferen*)))) or "ration shop*" or "farmer* market*" or "food desert*" or ((food or grocer*) N3 retail* N3 (tax* or subsid* or incentiv*)) or (school* N4 (meal* or feed* or food* or lunch*))))

93,429

S5 TI (((food N3 (loss* or wast*)) or ((food* or grocer* or soup) N4 (donat* or pantr* or bank* or kitchen* or transfer*)) or (food* N4 near* N4 spoil*))) OR SU(((food N3 (loss* or wast*)) or ((food* or grocer* or soup) N4 (donat* or pantr* or bank* or kitchen* or transfer*)) or (food* N4 near* N4 spoil*)))

52,484

S4 TI ((((food* or crop* or staple*) N3 (fortif* or biofortif*)) or ((recycl* or compost* or biodegrad* or plastic*) N3 (pack* or sache*)) or (post-harvest N4 (clean* or winnow* or cann* or mill* or thresh* or hull*)) or ((food* or crop* or grain*) N3 dry*))) OR SU((((food* or crop* or staple*) N3 (fortif* or biofortif*)) or ((recycl* or compost* or biodegrad* or plastic*) N3 (pack* or sache*)) or (post-harvest N4 (clean* or winnow* or cann* or mill* or thresh* or hull*)) or ((food* or crop* or grain*) N3 dry*)))

40,988

S3 TI ((((grain* or crop* or agricultur* or farm* or produce) N4 (silo* or stor* or shed* or warehous*)) or ((agricultur* or farm*) N3 (collection or distribution) N3 (centre* or center* or point* or hub*)) or ((farm* or produce or food* or agricultur*) N4 ("cold chain*" or ((refrigerat* or cold) N3 (truck* or transport* or transit)))) or ((import or imports or importation or export*) N4 (tariff* or quota* or ban* or restrict* or regulat*)) or "trade agreement*")) OR SU((((grain* or crop* or agricultur* or farm* or produce) N4 (silo* or stor* or shed* or warehous*)) or ((agricultur* or farm*) N3 (collection or distribution) N3 (centre* or center* or point* or hub*)) or ((farm* or produce or food* or agricultur*) N4 ("cold chain*" or ((refrigerat* or cold) N3 (truck* or transport* or transit)))) or ((import or imports or importation or export*) N4 (tariff* or quota* or ban* or restrict* or regulat*)) or "trade agreement*"))

131,999

S2 TI (((Food N3 (system or produc*)) or (agricultur* N3 produc*) or aquacultur* or fisher* or livestock* or ((kitchen or home*) N3 (farm* or garden*)) or "nutrition-sensitive" or (improv* N3 (seed* or variet* or crop*)) or (genetic* N3 modif* N3 (food* or organism*)) or GMO* or ((compost* or manure* or mulch* or fertili* or pesticid* or insecticid*) N3 (appli* or spray* or spread* or use or usage)) or ((drought* or pest* or insect*) N3 (toleran* or resist*)) or (rotat* N3 crop*) or (land N3 manage*) or "fixed distance planting" or (plant* N3 (row or rows*)) or ((farm* or crop or agricultur*) N4 subsid*) or (price* N4 purchas* N4 guarantee*) or ((agricultur* or crop* or rain* or weather or index) N4 insurance) or (irrigat* N4 (project* or program* or access* or improv*)) or "water meter*" or (rain* N3 (fed or feed*)) or (trench* N3 hill*) or hilling or "contour bund*" or zai or "water break" or terrac* or ((farm* or agricultur*) N3

(mechani?e* or mechani?ation*) or intercrop* or (companion N3 (plant* or variet* or species)) or "integrated soil fertility management" or ISFM or (pest N3 manag*)) OR SU(((Food N3 (system or produc*) or (agricultur* N3 produc*) or aquacultur* or fisher* or livestock* or ((kitchen or home*) N3 (farm* or garden*)) or "nutrition-sensitive" or (improv* N3 (seed* or variet* or crop*)) or (genetic* N3 modif* N3 (food* or organism*)) or GMO* or ((compost* or manure* or mulch* or fertili* or pesticid* or insecticid*) N3 (appl* or spray* or spread* or use or usage)) or ((drought* or pest* or insect*) N3 (toleran* or resist*)) or (rotat* N3 crop*) or (land N3 manage*) or "fixed distance planting" or (plant* N3 (row or rows*)) or ((farm* or crop or agricultur*) N4 subsid*) or (price* N4 purchas* N4 guarantee*) or ((agricultur* or crop* or rain* or weather or index) N4 insurance) or (irrigat* N4 (project* or program* or access* or improv*)) or "water meter*" or (rain* N3 (fed or feed*)) or (trench* N3 hill*) or hilling or "contour bund*" or zai or "water break" or terrac* or ((farm* or agricultur*) N3 (mechani?e* or mechani?ation*)) or intercrop* or (companion N3 (plant* or variet* or species)) or "integrated soil fertility management" or ISFM or (pest N3 manag*))

2,311,797

S1 TI ((afghanistan OR albania OR algeria OR "american samoa" OR angola OR "antigua and barbuda" OR antigua OR barbuda OR argentina OR armenia OR armenian OR aruba OR azerbaijan OR bahrain OR bangladesh OR barbados OR belarus OR byelarus OR belorussia OR byelorussian OR belize OR "british honduras" OR benin OR dahomey OR bhutan OR bolivia OR "bosnia and herzegovina" OR bosnia OR herzegovina OR botswana OR bechuanaland OR brazil OR brasil OR bulgaria OR "burkina faso" OR "burkina fasso" OR "upper volta" OR burundi OR urundi OR "cabo verde" OR "cape verde" OR cambodia OR kampuchea OR "khmer republic" OR cameroon OR cameron OR cameroun OR "central african republic" OR "ubangi shari" OR chad OR chile OR china OR colombia OR comoros OR "comoro islands" OR "iles comores" OR mayotte OR "democratic republic of the congo" OR "democratic republic congo" OR congo OR zaire OR "costa rica" OR "cote d'ivoire" OR "cote d ivoire" OR "cote divoire" OR "cote d ivoire" OR "ivory coast" OR croatia OR cuba OR cyprus OR "czech republic" OR czechoslovakia OR djibouti OR "french somaliland" OR dominica OR "dominican republic" OR ecuador OR egypt OR "united arab republic" OR "el salvador" OR "equatorial guinea" OR "spanish guinea" OR eritrea OR estonia OR eswatini OR swaziland OR ethiopia OR fiji OR gabon OR "gabonese republic" OR gambia OR "georgia (republic)" OR georgian OR ghana OR "gold coast" OR gibraltar OR greece OR grenada OR guam OR guatemala OR guinea OR "guinea bissau" OR guyana OR "british guiana" OR haiti OR hispaniola OR honduras OR hungary OR india OR indonesia OR timor OR iran OR iraq OR "isle of man" OR jamaica OR jordan OR kazakhstan OR kazakh OR kenya OR "democratic people's republic of korea" OR "republic of korea" OR "north korea" OR "south korea" OR korea OR kosovo OR kyrgyzstan OR kirghizia OR kirgizstan OR "kyrgyz republic" OR kirghiz OR laos OR "lao pdr" OR "lao people's democratic republic" OR latvia OR lebanon OR "lebanese republic" OR lesotho OR basutoland OR liberia OR libya OR "libyan arab jamahiriya" OR lithuania OR macau OR macao OR "macedonia (republic)" OR macedonia OR madagascar OR "malagasy republic" OR malawi OR nyasaland OR malaysia OR "malay federation" OR "malaya federation" OR maldives OR "indian ocean islands" OR "indian ocean" OR mali OR malta OR micronesia OR "federated states of micronesia" OR kiribati OR "marshall islands" OR nauru OR "northern mariana islands" OR palau OR tuvalu OR mauritania OR mauritius OR mexico OR moldova OR moldovian OR mongolia OR montenegro OR morocco OR ifni OR mozambique OR "portuguese east africa" OR myanmar OR burma OR namibia OR nepal OR "netherlands antilles" OR nicaragua OR niger OR nigeria OR oman OR muscat OR pakistan OR panama OR

"papua new guinea" OR "new guinea" OR paraguay OR peru OR philippines OR philipines OR phillippines OR philippines OR poland OR "polish people's republic" OR portugal OR "portuguese republic" OR "puerto rico" OR romania OR russia OR "russian federation" OR ussr OR "soviet union" OR "union of soviet socialist republics" OR rwnda OR ruanda OR samoa OR "pacific islands" OR polynesia OR "samoan islands" OR "navigator island" OR "navigator islands" OR "sao tome and principe" OR "saudi arabia" OR senegal OR serbia OR seychelles OR "sierra leone" OR slovakia OR "slovak republic" OR slovenia OR melanesia OR "solomon island" OR "solomon islands" OR "norfolk island" OR "norfolk islands" OR somalia OR "south africa" OR "south sudan" OR "sri lanka" OR ceylon OR "saint kitts and nevis" OR "st. kitts and nevis" OR "saint lucia" OR "st. lucia" OR "saint vincent and the grenadines" OR "saint vincent" OR "st. vincent" OR grenadines OR sudan OR suriname OR surinam OR "dutch guiana" OR "netherlands guiana" OR syria OR "syrian arab republic" OR tajikistan OR tadjikistan OR tadhikistan OR tadhik OR tanzania OR tanganyika OR thailand OR siam OR "timor leste" OR "east timor" OR togo OR "togolese republic" OR tonga OR "trinidad and tobago" OR trinidad OR tobago OR tunisia OR turkey OR "turkey (republic)" OR turkmenistan OR turkmen OR uganda OR ukraine OR uruguay OR uzbekistan OR uzbek OR vanuatu OR "new hebrides" OR venezuela OR vietnam OR "viet nam" OR "middle east" OR "west bank" OR gaza OR palestine OR yemen OR yugoslavia OR zambia OR zimbabwe OR "northern rhodesia" OR "global south" OR "africa south of the sahara" OR "sub-saharan africa" OR "subsaharan africa" OR "africa, central" OR "central africa" OR "africa, northern" OR "north africa" OR "northern africa" OR magreb OR maghrib OR sahara OR "africa, southern" OR "southern africa" OR "africa, eastern" OR "east africa" OR "eastern africa" OR "africa, western" OR "west africa" OR "western africa" OR "west indies" OR "indian ocean islands" OR caribbean OR "central america" OR "latin america" OR "south and central america" OR "south america" OR "asia, central" OR "central asia" OR "asia, northern" OR "north asia" OR "northern asia" OR "asia, southeastern" OR "southeastern asia" OR "south eastern asia" OR "southeast asia" OR "south east asia" OR "asia, western" OR "western asia" OR "europe, eastern" OR "east europe" OR "eastern europe" OR "developing country" OR "developing countries" OR "developing nation*" OR "developing population*" OR "developing world" OR "less developed countr*" OR "less developed nation*" OR "less developed population*" OR "less developed world" OR "lesser developed countr*" OR "lesser developed nation*" OR "lesser developed population*" OR "lesser developed world" OR "under developed countr*" OR "under developed nation*" OR "under developed population*" OR "under developed world" OR "underdeveloped countr*" OR "underdeveloped nation*" OR "underdeveloped population*" OR "underdeveloped world" OR "middle income countr*" OR "middle income nation*" OR "middle income population*" OR "low income countr*" OR "low income nation*" OR "low income population*" OR "lower income countr*" OR "lower income nation*" OR "lower income population*" OR "underserved countr*" OR "underserved nation*" OR "underserved population*" OR "underserved world" OR "under served countr*" OR "under served nation*" OR "under served population*" OR "under served world" OR "deprived countr*" OR "deprived nation*" OR "deprived population*" OR "deprived world" OR "poor countr*" OR "poor nation*" OR "poor population*" OR "poor world" OR "poorer countr*" OR "poorer nation*" OR "poorer population*" OR "poorer world" OR "developing econom*" OR "less developed econom*" OR "lesser developed econom*" OR "under developed econom*" OR "underdeveloped econom*" OR "middle income econom*" OR "low income econom*" OR "lower income econom*" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic"

OR "lower gross national" OR Imic OR Imics OR "third world" OR "lami countr*" OR "transitional countr*" OR "emerging econom*" OR "emerging nation*")) OR AB (((afghanistan OR albania OR algeria OR "american samoa" OR angola OR "antigua and barbuda" OR antigua OR barbuda OR argentina OR armenia OR armenian OR aruba OR azerbaijan OR bahrain OR bangladesh OR barbados OR belarus OR byelarus OR belorussia OR byelorussian OR belize OR "british honduras" OR benin OR dahomey OR bhutan OR bolivia OR "bosnia and herzegovina" OR bosnia OR herzegovina OR botswana OR bechuanaland OR brazil OR brasil OR bulgaria OR "burkina faso" OR "burkina fasso" OR "upper volta" OR burundi OR urundi OR "cabo verde" OR "cape verde" OR cambodia OR kampuchea OR "khmer republic" OR cameroon OR cameron OR cameroun OR "central african republic" OR "ubangi shari" OR chad OR chile OR china OR colombia OR comoros OR "comoro islands" OR "iles comores" OR mayotte OR "democratic republic of the congo" OR "democratic republic congo" OR congo OR zaire OR "costa rica" OR "cote d'ivoire" OR "cote d'ivoire" OR "cote divoire" OR "cote d ivoire" OR "ivory coast" OR croatia OR cuba OR cyprus OR "czech republic" OR czechoslovakia OR djibouti OR "french somaliland" OR dominica OR "dominican republic" OR ecuador OR egypt OR "united arab republic" OR "el salvador" OR "equatorial guinea" OR "spanish guinea" OR eritrea OR estonia OR eswatini OR swaziland OR ethiopia OR fiji OR gabon OR "gabonese republic" OR gambia OR "georgia (republic)" OR georgian OR ghana OR "gold coast" OR gibraltar OR greece OR grenada OR guam OR guatemala OR guinea OR "guinea bissau" OR guyana OR "british guiana" OR haiti OR hispaniola OR honduras OR hungary OR india OR indonesia OR timor OR iran OR iraq OR "isle of man" OR jamaica OR jordan OR kazakhstan OR kazakh OR kenya OR "democratic people's republic of korea" OR "republic of korea" OR "north korea" OR "south korea" OR korea OR kosovo OR kyrgyzstan OR kirghizia OR kirgizstan OR "kyrgyz republic" OR kirghiz OR laos OR "lao pdr" OR "lao people's democratic republic" OR latvia OR lebanon OR "lebanese republic" OR lesotho OR basutoland OR liberia OR libya OR "libyan arab jamahiriya" OR lithuania OR macau OR macao OR "macedonia (republic)" OR macedonia OR madagascar OR "malagasy republic" OR malawi OR nyasaland OR malaysia OR "malay federation" OR "malaya federation" OR maldives OR "indian ocean islands" OR "indian ocean" OR mali OR malta OR micronesia OR "federated states of micronesia" OR kiribati OR "marshall islands" OR nauru OR "northern mariana islands" OR palau OR tuvalu OR mauritania OR mauritius OR mexico OR moldova OR moldovian OR mongolia OR montenegro OR morocco OR ifni OR mozambique OR "portuguese east africa" OR myanmar OR burma OR namibia OR nepal OR "netherlands antilles" OR nicaragua OR niger OR nigeria OR oman OR muscat OR pakistan OR panama OR "papua new guinea" OR "new guinea" OR paraguay OR peru OR philippines OR philippines OR philippines OR philippines OR poland OR "polish people's republic" OR portugal OR "portuguese republic" OR "puerto rico" OR romania OR russia OR "russian federation" OR ussr OR "soviet union" OR "union of soviet socialist republics" OR rrwanda OR ruanda OR samoa OR "pacific islands" OR polynesia OR "samoan islands" OR "navigator island" OR "navigator islands" OR "sao tome and principe" OR "saudi arabia" OR senegal OR serbia OR seychelles OR "sierra leone" OR slovakia OR "slovak republic" OR slovenia OR melanesia OR "solomon island" OR "solomon islands" OR "norfolk island" OR "norfolk islands" OR somalia OR "south africa" OR "south sudan" OR "sri lanka" OR ceylon OR "saint kitts and nevis" OR "st. kitts and nevis" OR "saint lucia" OR "st. lucia" OR "saint vincent and the grenadines" OR "saint vincent" OR "st. vincent" OR grenadines OR sudan OR suriname OR surinam OR "dutch guiana" OR "netherlands guiana" OR syria OR "syrian arab republic" OR tajikistan OR tadjikistan OR tadjikistan OR tadjik OR tanzania OR

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OR cuba OR cyprus OR "czech republic" OR czechoslovakia OR djibouti OR "french
somaliland" OR dominica OR "dominican republic" OR ecuador OR egypt OR
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guinea OR "guinea bissau" OR guyana OR "british guiana" OR haiti OR hispaniola
OR honduras OR hungary OR india OR indonesia OR timor OR iran OR iraq OR
"isle of man" OR jamaica OR jordan OR kazakhstan OR kazakh OR kenya OR
"democratic people's republic of korea" OR "republic of korea" OR "north korea" OR
"south korea" OR korea OR kosovo OR kyrgyzstan OR kirghizia OR kirgizstan OR
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republic" OR latvia OR lebanon OR "lebanese republic" OR lesotho OR basutoland
OR liberia OR libya OR "libyan arab jamahiriya" OR lithuania OR macau OR macao
OR "macedonia (republic)" OR macedonia OR madagascar OR "malagasy republic"
OR malawi OR niasaland OR malaysia OR "malay federation" OR "malaya
federation" OR maldives OR "indian ocean islands" OR "indian ocean" OR mali OR
malta OR micronesia OR "federated states of micronesia" OR kiribati OR "marshall
islands" OR nauru OR "northern mariana islands" OR palau OR tuvalu OR
mauritania OR mauritius OR mexico OR moldova OR moldovian OR mongolia OR
montenegro OR morocco OR ifni OR mozambique OR "portuguese east africa" OR
myanmar OR burma OR namibia OR nepal OR "netherlands antilles" OR nicaragua
OR niger OR nigeria OR oman OR muscat OR pakistan OR panama OR "papua
new guinea" OR "new guinea" OR paraguay OR peru OR philippines OR philippines
OR philippines OR phillippines OR poland OR "polish people's republic" OR portugal
OR "portuguese republic" OR "puerto rico" OR romania OR russia OR "russian
federation" OR ussr OR "soviet union" OR "union of soviet socialist republics" OR
rwanda OR ruanda OR samoa OR "pacific islands" OR polynesia OR "samoan
islands" OR "navigator island" OR "navigator islands" OR "sao tome and principe"
OR "saudi arabia" OR senegal OR serbia OR seychelles OR "sierra leone" OR
slovakia OR "slovak republic" OR slovenia OR melanesia OR "solomon island" OR
"solomon islands" OR "norfolk island" OR "norfolk islands" OR somalia OR "south
africa" OR "south sudan" OR "sri lanka" OR ceylon OR "saint kitts and nevis" OR "st.
kitts and nevis" OR "saint lucia" OR "st. lucia" OR "saint vincent and the grenadines"
OR "saint vincent" OR "st. vincent" OR grenadines OR sudan OR suriname OR
surinam OR "dutch guiana" OR "netherlands guiana" OR syria OR "syrian arab
republic" OR tajikistan OR tadjikistan OR tadjhikistan OR tadjhik OR tanzania OR
tanganyika OR thailand OR siam OR "timor leste" OR "east timor" OR togo OR
"togolese republic" OR tonga OR "trinidad and tobago" OR trinidad OR tobago OR
tunisia OR turkey OR "turkey (republic)" OR turkmenistan OR turkmen OR uganda
OR ukraine OR uruguay OR uzbekistan OR uzbek OR vanuatu OR "new hebrides"
OR venezuela OR vietnam OR "viet nam" OR "middle east" OR "west bank" OR
gaza OR palestine OR yemen OR yugoslavia OR zambia OR zimbabwe OR
"northern rhodesia" OR "global south" OR "africa south of the sahara" OR "sub-
saharan africa" OR "subsaharan africa" OR "africa, central" OR "central africa" OR
"africa, northern" OR "north africa" OR "northern africa" OR magreb OR maghrib OR
sahara OR "africa, southern" OR "southern africa" OR "africa, eastern" OR "east
africa" OR "eastern africa" OR "africa, western" OR "west africa" OR "western africa"
OR "west indies" OR "indian ocean islands" OR caribbean OR "central america" OR
"latin america" OR "south and central america" OR "south america" OR "asia,
central" OR "central asia" OR "asia, northern" OR "north asia" OR "northern asia"

OR "asia, southeastern" OR "southeastern asia" OR "south eastern asia" OR "southeast asia" OR "south east asia" OR "asia, western" OR "western asia" OR "europe, eastern" OR "east europe" OR "eastern europe" OR "developing country" OR "developing countries" OR "developing nation*" OR "developing population*" OR "developing world" OR "less developed countr*" OR "less developed nation*" OR "less developed population*" OR "less developed world" OR "lesser developed countr*" OR "lesser developed nation*" OR "lesser developed population*" OR "lesser developed world" OR "under developed countr*" OR "under developed nation*" OR "under developed population*" OR "under developed world" OR "underdeveloped countr*" OR "underdeveloped nation*" OR "underdeveloped population*" OR "underdeveloped world" OR "middle income countr*" OR "middle income nation*" OR "middle income population*" OR "low income countr*" OR "low income nation*" OR "low income population*" OR "lower income countr*" OR "lower income nation*" OR "lower income population*" OR "underserved countr*" OR "underserved nation*" OR "underserved population*" OR "underserved world" OR "under served countr*" OR "under served nation*" OR "under served population*" OR "under served world" OR "deprived countr*" OR "deprived nation*" OR "deprived population*" OR "deprived world" OR "poor countr*" OR "poor nation*" OR "poor population*" OR "poor world" OR "poorer countr*" OR "poorer nation*" OR "poorer population*" OR "poorer world" OR "developing econom*" OR "less developed econom*" OR "lesser developed econom*" OR "under developed econom*" OR "underdeveloped econom*" OR "middle income econom*" OR "low income econom*" OR "lower income econom*" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic" OR "lower gross national" OR "lami countr*" OR "lami countr*" OR "transitional countr*" OR "emerging econom*" OR "emerging nation*"))

15,771,883

Cochrane Library – Searched 27th May 2020

#1 (afghanistan OR albania OR algeria OR "american samoa" OR angola OR "antigua and barbuda" OR antigua OR barbuda OR argentina OR armenia OR armenian OR aruba OR azerbaijan OR bahrain OR bangladesh OR barbados OR "republic of belarus" OR belarus OR byelarus OR belorussia OR byelorussian OR belize OR "british honduras" OR benin OR dahomey OR bhutan OR bolivia OR "bosnia and herzegovina" OR bosnia OR herzegovina OR botswana OR bechuanaland OR brazil OR brasil OR bulgaria OR "burkina faso" OR "burkina fasso" OR "upper volta" OR burundi OR urundi OR "cabo verde" OR "cape verde" OR cambodia OR kampuchea OR "khmer republic" OR cameroon OR cameron OR cameroun OR "central african republic" OR "ubangi shari" OR chad OR chile OR china OR colombia OR comoros OR "comoro islands" OR "iles comores" OR mayotte OR "democratic republic of the congo" OR "democratic republic congo" OR congo OR zaire OR "costa rica" OR "cote d'ivoire" OR "cote d'ivoire" OR "cote divoire" OR "cote d ivoire" OR "ivory coast" OR croatia OR cuba OR cyprus OR "czech republic" OR czechoslovakia OR djibouti OR "french somaliland" OR dominica OR "dominican republic" OR ecuador OR egypt OR "united arab republic" OR "el salvador" OR "equatorial guinea" OR "spanish guinea" OR eritrea OR estonia OR eswatini OR swaziland OR ethiopia OR fiji OR gabon OR "gabonese republic" OR gambia OR "georgia (republic)" OR georgia OR georgian OR ghana OR "gold coast" OR gibraltar OR greece OR grenada OR guam OR guatemala OR guinea OR

"guinea bissau" OR guyana OR "british guiana" OR haiti OR hispaniola OR honduras OR hungary OR india OR indonesia OR timor OR iran OR iraq OR "isle of man" OR jamaica OR jordan OR kazakhstan OR kazakh OR kenya OR "democratic people's republic of korea" OR "republic of korea" OR north korea OR south korea OR korea OR kosovo OR kyrgyzstan OR kirghizia OR kirgizstan OR "kyrgyz republic" OR kirghiz OR laos OR "lao pdr" OR "lao people's democratic republic" OR latvia OR lebanon OR "lebanese republic" OR lesotho OR basutoland OR liberia OR libya OR "libyan arab jamahiriya" OR lithuania OR macau OR macao OR "macedonia (republic)" OR macedonia OR madagascar OR "malagasy republic" OR malawi OR nyasaland OR malaysia OR "malay federation" OR "malaya federation" OR maldives OR "indian ocean islands" OR "indian ocean" OR mali OR malta OR micronesia OR "federated states of micronesia" OR kiribati OR "marshall islands" OR nauru OR "northern mariana islands" OR palau OR tuvalu OR mauritania OR mauritius OR mexico OR moldova OR moldovian OR mongolia OR montenegro OR morocco OR ifni OR mozambique OR "portuguese east africa" OR myanmar OR burma OR namibia OR nepal OR "netherlands antilles" OR nicaragua OR niger OR nigeria OR oman OR muscat OR pakistan OR panama OR "papua new guinea" OR paraguay OR peru OR philippines OR philipines OR phillipines OR philippines OR poland OR "polish people's republic" OR portugal OR "portuguese republic" OR "puerto rico" OR romania OR russia OR "russian federation" OR ussr OR "soviet union" OR "union of soviet socialist republics" OR rwnda OR ruanda OR samoa OR "pacific islands" OR polynesia OR "samoan islands" OR "navigator island" OR "navigator islands" OR "sao tome and principe" OR "saudi arabia" OR senegal OR serbia OR seychelles OR "sierra leone" OR slovakia OR "slovak republic" OR slovenia OR melanesia OR "solomon island" OR "solomon islands" OR "norfolk island" OR "norfolk islands" OR somalia OR "south africa" OR "south sudan" OR "sri lanka" OR ceylon OR "saint kitts and nevis" OR "st. kitts and nevis" OR "saint lucia" OR "st. lucia" OR "saint vincent and the grenadines" OR "saint vincent" OR "st. vincent" OR grenadines OR sudan OR suriname OR surinam OR "dutch guiana" OR "netherlands guiana" OR syria OR "syrian arab republic" OR tajikistan OR tadjikistan OR tadjikistan OR tadjhikistan OR tadjhik OR tanzania OR tanganyika OR thailand OR siam OR "timor leste" OR "east timor" OR togo OR "togolese republic" OR tonga OR "trinidad and tobago" OR trinidad OR tobago OR tunisia OR turkey (republic)" OR turkmenistan OR turkmen OR uganda OR ukraine OR uruguay OR uzbekistan OR uzbek OR vanuatu OR "new hebrides" OR venezuela OR vietnam OR "viet nam" OR "middle east" OR "west bank" OR gaza OR palestine OR yemen OR yugoslavia OR zambia OR zimbabwe OR "northern rhodesia" OR "global south" OR "africa south of the sahara" OR "sub saharan africa" OR "subsaharan africa" OR "africa, central" OR "central africa" OR "africa, northern" OR "north africa" OR "northern africa" OR magreb OR maghrib OR sahara OR "africa, southern" OR "southern africa" OR "africa, eastern" OR "east africa" OR "eastern africa" OR "africa, western" OR "west africa" OR "western africa" OR "west indies" OR "indian ocean islands" OR caribbean OR "central america" OR "latin america" OR "south and central america" OR "south america" OR "asia, central" OR "central asia" OR "asia, northern" OR "north asia" OR "northern asia" OR "asia, southeastern" OR "southeastern asia" OR "south eastern asia" OR "southeast asia" OR "south east asia" OR "asia, western" OR "western asia" OR "europe, eastern" OR "east europe" OR "eastern europe" OR "developing country" OR "developing countries" OR "developing nation" OR "developing nations" OR "developing population" OR "developing populations" OR "developing world" OR "less developed country" OR "less developed countries" OR "less developed nation" OR "less developed nations" OR "less developed population" OR "less developed populations" OR "less developed world" OR "lesser

developed country" OR "lesser developed countries" OR "lesser developed nation" OR "lesser developed nations" OR "lesser developed population" OR "lesser developed populations" OR "lesser developed world" OR "under developed country" OR "under developed countries" OR "under developed nation" OR "under developed nations" OR "under developed population" OR "under developed populations" OR "under developed world" OR "underdeveloped country" OR "underdeveloped countries" OR "underdeveloped nation" OR "underdeveloped nations" OR "underdeveloped population" OR "underdeveloped populations" OR "underdeveloped world" OR "middle income country" OR "middle income countries" OR "middle income nation" OR "middle income nations" OR "middle income population" OR "middle income populations" OR "low income country" OR "low income countries" OR "low income nation" OR "low income nations" OR "low income population" OR "low income populations" OR "lower income country" OR "lower income countries" OR "lower income nation" OR "lower income nations" OR "lower income population" OR "lower income populations" OR "underserved country" OR "underserved countries" OR "underserved nation" OR "underserved nations" OR "underserved population" OR "underserved populations" OR "underserved world" OR "under served country" OR "under served countries" OR "under served nation" OR "under served nations" OR "under served population" OR "under served populations" OR "under served world" OR "deprived country" OR "deprived countries" OR "deprived nation" OR "deprived nations" OR "deprived population" OR "deprived populations" OR "deprived world" OR "poor country" OR "poor countries" OR "poor nation" OR "poor nations" OR "poor population" OR "poor populations" OR "poor world" OR "poorer country" OR "poorer countries" OR "poorer nation" OR "poorer nations" OR "poorer population" OR "poorer populations" OR "poorer world" OR "developing economy" OR "developing economies" OR "less developed economy" OR "less developed economies" OR "under developed economy" OR "under developed economies" OR "underdeveloped economy" OR "underdeveloped economies" OR "middle income economy" OR "middle income economies" OR "low income economy" OR "low income economies" OR "lower income economy" OR "lower income economies" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic" OR "lower gross national" OR "lami country" OR "lami countries" OR "transitional country" OR "transitional countries" OR "emerging economies" OR "emerging nation" OR "emerging nations"):ti,ab,kw

#2 ((("farm* field school*" or (farm* near/3 (train* or (build near/3 capacity))) or "demonstration plot*" or ((agricultur* or rural) near extension) or farm*) near/3 educat*) or (farm* near/3 (organi?ation* or group* or cooperative* or co-op* or club*)) or (("social protection" or microfinance or "micro finance" or microloan* or "micro loan*") near/4 (farm* or smallholder* or agricultur*)):ti,ab,kw

#3 ((Food near/3 (system or produc*)) or (agricultur* near/3 produc*) or aquacultur* or fisher* or livestock* or ((kitchen or home*) near/3 (farm* or garden*)) or "nutrition-sensitive" or (improv* near/3 (seed* or variet* or crop*)) or (genetic* near modif* near (food* or organism*)) or GMO* or ((compost* or manure* or mulch* or fertili* or pesticid* or insecticid*) near/3 (appl* or spray* or spread* or "use" or usage)) or ((drought* or pest* or insect*) near/3 (toleran* or resist*)) or (rotat* near/3 crop*) or (land near/3 manage*) or "fixed distance planting" or (plant* near/3 row?) or ((farm* or crop or agricultur*) near/6 subsid*) or (price* near/6 purchas* near/6 guarantee*) or ((agricultur* or crop* or rain* or weather or index) near/6 insurance) or (irrigat* near/6 (project* or program* or access* or improv*)) or "water meter*" or (rain* near/3 (fed or feed*)) or (trench* near/3 hill*) or hilling or "contour bund*" or zai

- or "water break" or terrac* or ((farm* or agricultur*) near/3 (mechani?e* or mechani?ation*)) or intercrop* or (companion near/3 (plant* or variet* or species)) or "integrated soil fertility management" or ISFM or (pest near/3 manage*):ti,ab,kw
- #4 (((grain* or crop* or agricultur* or aquacultur* or farm* or produce) near/6 (silo* or stor* or shed* or warehous*)) or ((agricultur* or farm*) near/3 (collect* or distribut*) near/3 (centre* or center* or point* or hub*)) or ((farm* or produce or food* or agricultur*) near/6 ("cold chain*" or ((refrigerat* or cold) near/3 (truck* or transport* or transit)))) or ((import? or importation or export*) near/6 (tariff* or quota* or ban* or restrict* or regulat*)) or "trade agreement*"):ti,ab,kw
- #5 (((food* or crop* or staple*) near/3 (fortif* or biofortif*)) or ((recycl* or compost* or biodegrad* or plastic*) near/3 (pack* or sache*)) or (post-harvest near/6 (clean* or winnow* or cann* or mill* or thresh* or hull*)) or ((food* or crop* or grain*) near/3 dry*)):ti,ab,kw
- #6 ((food near/3 (loss* or wast*)) or ((food* or grocer* or soup) near/6 (donat* or pantr* or bank* or kitchen* or transfer*)) or (food* near/6 near* near/6 spoil*)):ti,ab,kw
- #7 ("food environment*" or (zoning and (food* near/3 (security or access*))) or ((sugar* or SSB or "unhealthy food*") near/3 tax*) or nudg* or ((food* or eat* or feed* or meal* or diet*) near/6 (deci* or ((cultur* or social) near/3 (norm* or preferen*)))) or "ration shop*" or "farmer* market*" or "food desert*" or ((food or grocer*) near/3 retail* near/3 (tax* or subsid* or incentiv*)) or (school* near/6 (meal* or feed* or food* or lunch*)):ti,ab,kw
- #8 (((food* or consumer*) near/6 (subsid* or "price control*")) or (food* near/6 (cash or "social assistance" or "social safety net" or voucher* or welfare)):ti,ab,kw
- #9 ((food* near/6 ((advertis* or label* or market*) near/3 (ban* or restrict* or regulat* or polic* or law* or legislat*))) or ((supermarket or ((food* or grocer* or convenience or corner) near (store* or market*))) near/6 (design* or redesign* or re-design* or layout* or innovat*)) or (front near/3 pack* near/3 label*)):ti,ab,kw
- #10 ((food* near/3 (safe* or quality) near/3 (regulat* or restrict* or polic* or law* or legislat* or inspect*)) or (food* near/3 certif*)):ti,ab,kw
- #11 (cook* or ((meal* or food*) near/3 prepar*) or (wom?n near/6 (food* or eat* or feed* or meal* or diet*) near/6 (empower* or deci*)) or ((food* or eat* or feed* or breastfeed* or "breast feed*" or meal* or diet* or "F&V") near/6 (inform* or educat* or promot* or campaign* or media or initiative* or (peer near (counsel* or support)) or (community near/3 (meet* or class* or engag* or participat*)) or "door-to-door")):ti,ab,kw
- #12 [mh ^Agriculture] or [mh ^Agricultural Irrigation"] or [mh ^Animal Husbandry"]
- #13 [mh ^Aquaculture] or [mh ^Beekeeping] or [mh ^Crop Production"] or [mh ^Crop Protection"] or [mh ^Dairying] or [mh ^Domestication] or [mh ^Farms] or [mh ^Gardens] or [mh ^Horticulture] or [mh ^Hydroponics] or [mh ^Organic Agriculture"] or [mh ^Weed Control"] or [mh ^Food Assistance"]
- #14 [mh ^Food Safety"] or [mh ^Food Contamination"] or [mh ^Food Inspection"] or [mh ^Hazard Analysis Critical Control Points"] or [mh ^Nutritive Value"] or [mh ^Glycemic Index"] or [mh ^Glycemic Load"] or [mh ^Nutrition Policy"] or [mh ^Recommended Dietary Allowances"] or [mh ^Nutrition Therapy"] or [mh ^Diet Therapy"] or [mh ^Nutritional Support"]
- #15 [mh ^Abattoirs] or [mh ^Food Quality"]
- #16 [mh ^Meat-Packing Industry"]
- #17 [mh ^Food Packaging"] or [mh ^Edible Films"]
- #18 [mh ^Food Labeling"] or [mh ^Food Preservation"]
- #19 [mh ^Food Storage"]
- #20 [mh ^Food-Processing Industry"]

#21 {OR #2-#20}

#22 #1 AND #21 with Cochrane Library publication date Between Jan 2000 and May 2020 – 4447 hits

Embase Classic+Embase <1947 to 2020 May 27> - Searched 28th May 2020

1 (afghanistan or albania or algeria or american samoa or angola or "antigua and barbuda" or antigua or barbuda or argentina or armenia or armenian or aruba or azerbaijan or bahrain or bangladesh or barbados or republic of belarus or belarus or byelarus or belorussia or byelorussian or belize or british honduras or benin or dahomey or bhutan or bolivia or "bosnia and herzegovina" or bosnia or herzegovina or botswana or bechuanaland or brazil or brasil or bulgaria or burkina faso or burkina fasso or upper volta or burundi or urundi or cabo verde or cape verde or cambodia or kampuchea or khmer republic or cameroon or cameron or cameroun or central african republic or ubangi shari or chad or chile or china or colombia or comoros or comoro islands or iles comores or mayotte or democratic republic of the congo or democratic republic congo or congo or zaire or costa rica or "cote d'ivoire" or "cote d'ivoire" or cote divoire or cote d ivoire or ivory coast or croatia or cuba or cyprus or czech republic or czechoslovakia or djibouti or french somaliland or dominica or dominican republic or ecuador or egypt or united arab republic or el salvador or equatorial guinea or spanish guinea or eritrea or estonia or eswatini or swaziland or ethiopia or fiji or gabon or gabonese republic or gambia or "georgia (republic)" or georgian or ghana or gold coast or gibraltar or greece or grenada or guam or guatemala or guinea or guinea bissau or guyana or british guiana or haiti or hispaniola or honduras or hungary or india or indonesia or timor or iran or iraq or isle of man or jamaica or jordan or kazakhstan or kazakh or kenya or "democratic people's republic of korea" or republic of korea or north korea or south korea or korea or kosovo or kyrgyzstan or kirghizia or kirgizstan or kyrgyz republic or kirghiz or laos or lao pdr or "lao people's democratic republic" or latvia or lebanon or lebanese republic or lesotho or basutoland or liberia or libya or libyan arab jamahiriya or lithuania or macau or macao or "macedonia (republic)" or macedonia or madagascar or malagasy republic or malawi or nyasaland or malaysia or malay federation or malaya federation or maldives or indian ocean islands or indian ocean or mali or malta or micronesia or federated states of micronesia or kiribati or marshall islands or nauru or northern mariana islands or palau or tuvalu or mauritania or mauritius or mexico or moldova or moldovian or mongolia or montenegro or "montenegro (republic)" or morocco or ifni or mozambique or portuguese east africa or myanmar or burma or namibia or nepal or netherlands antilles or nicaragua or niger or nigeria or oman or muscat or pakistan or panama or papua new guinea or new guinea or paraguay or peru or philippines or philipines or phillipines or phillippines or poland or "polish people's republic" or portugal or portuguese republic or puerto rico or romania or russia or russian federation or ussr or soviet union or union of soviet socialist republics or rwanda or ruanda or samoa or pacific islands or polynesia or samoan islands or navigator island or navigator islands or "sao tome and principe" or saudi arabia or senegal or serbia or seychelles or sierra leone or slovakia or slovak republic or slovenia or melanesia or solomon island or solomon islands or norfolk island or norfolk islands or somalia or south africa or south sudan or sri lanka or ceylon or "saint kitts and nevis" or "st. kitts and nevis" or saint lucia or

"st. lucia" or "saint vincent and the grenadines" or saint vincent or "st. vincent" or grenadines or sudan or suriname or surinam or dutch guiana or netherlands guiana or syria or syrian arab republic or tajikistan or tadjikistan or tadjhikistan or tadjhik or tanzania or tanganyika or thailand or siam or timor leste or east timor or togo or togolese republic or tonga or "trinidad and tobago" or trinidad or tobago or tunisia or turkey or "turkey (republic)" or turkmenistan or turkmen or uganda or ukraine or uruguay or uzbekistan or uzbek or vanuatu or new hebrides or venezuela or vietnam or viet nam or middle east or west bank or gaza or palestine or yemen or yugoslavia or zambia or zimbabwe or northern rhodesia or global south or africa south of the sahara or "sub saharan africa" or subsaharan africa or africa, central or central africa or africa, northern or north africa or northern africa or magreb or maghrib or sahara or africa, southern or southern africa or africa, eastern or east africa or eastern africa or africa, western or west africa or western africa or west indies or indian ocean islands or caribbean region or caribbean islands or caribbean or central america or latin america or "south and central america" or south america or asia, central or central asia or asia, northern or north asia or northern asia or asia, southeastern or southeastern asia or south eastern asia or southeast asia or south east asia or asia, western or western asia or europe, eastern or east europe or eastern europe or developing country or developing countries or developing nation? or developing population? or developing world or less developed countr* or less developed nation? or less developed population? or less developed world or lesser developed countr* or lesser developed nation? or lesser developed population? or lesser developed world or under developed countr* or under developed nation? or under developed population? or under developed world or underdeveloped countr* or underdeveloped nation? or underdeveloped population? or underdeveloped world or middle income countr* or middle income nation? or middle income population? or low income countr* or low income nation? or low income population? or lower income countr* or lower income nation? or lower income population? or underserved countr* or underserved nation? or underserved population? or underserved world or under served countr* or under served nation? or under served population? or under served world or deprived countr* or deprived nation? or deprived population? or deprived world or poor countr* or poor nation? or poor population? or poor world or poorer countr* or poorer nation? or poorer population? or poorer world or developing econom* or less developed econom* or lesser developed econom* or under developed econom* or underdeveloped econom* or middle income econom* or low income econom* or lower income econom* or low gdp or low gnp or low gross domestic or low gross national or lower gdp or lower gnp or lower gross domestic or lower gross national or lmic or lmic* or third world or lami countr* or transitional countr* or emerging economy or emerging economies or emerging nation?.ti,ab,sh,kw. (2310960)

2 ((Food adj3 (system or produc*) or (agricultur* adj3 produc*) or aquacultur* or fisher* or livestock* or ((kitchen or home*) adj3 (farm* or garden*)) or "nutrition-sensitive" or (improv* adj3 (seed* or variet* or crop*)) or (genetic* adj3 modif* adj3 (food* or organism*)) or GMO* or ((compost* or manure* or mulch* or fertill* or pesticid* or insecticid*) adj3 (appl* or spray* or spread* or "use" or usage)) or ((drought* or pest* or insect*) adj3 (toleran* or resist*)) or (rotat* adj3 crop*) or (land adj3 manage*) or "fixed distance planting" or (plant* adj3 (row or rows*)) or ((farm* or crop or agricultur*) adj4 subsid*) or (price* adj4 purchas* adj4 guarantee*) or ((agricultur* or crop* or rain* or weather or index) adj4 insurance) or (irrigat* adj4 (project* or program* or access* or improv*)) or "water meter*" or (rain* adj3 (fed or feed*)) or (trench* adj3 hill*) or hilling or "contour bund*" or zai or "water break" or terrac* or ((farm* or agricultur*) adj3 (mechani?e* or mechani?ation*)) or intercrop*

- or (companion adj3 (plant* or variet* or species)) or "integrated soil fertility management" or ISFM or (pest adj3 manag*).ti,ab,kw. (235400)
- 3 agriculture/ or agricultural irrigation/ or aquaculture/ or fisheries/ or crop production/ or crop protection/ or organic agriculture/ or weed control/ or gardens/ or horticulture/ (82828)
- 4 (((grain* or crop* or agricultur* or farm* or produce) adj4 (silo* or stor* or shed* or warehous*)) or ((agricultur* or farm*) adj3 (collection or distribution) adj3 (centre* or center* or point* or hub*)) or ((farm* or produce or food* or agricultur*) adj4 ("cold chain*" or ((refrigerat* or cold) adj3 (truck* or transport* or transit)))) or ((import or imports or importation or export*) adj4 (tariff* or quota* or ban* or restrict* or regulat*)) or "trade agreement").ti,ab,kw. (6673)
- 5 food industry/ or food storage/ (31179)
- 6 (((food* or crop* or staple*) adj3 (fortif* or biofortif*)) or ((recycl* or compost* or biodegrad* or plastic*) adj3 (pack* or sache*)) or (post-harvest adj4 (clean* or winnow* or cann* or mill* or thresh* or hull*)) or ((food* or crop* or grain*) adj3 dry*).ti,ab,kw. (7772)
- 7 biofortification/ or food packaging/ (10825)
- 8 ((food adj3 (loss* or wast*)) or ((food* or grocer* or soup) adj4 (donat* or pantr* or bank* or kitchen* or transfer*)) or (food* adj4 near* adj4 spoil*).ti,ab,kw. (8101)
- 9 ("food environment*" or (zoning and (food* adj3 (security or access*))) or ((sugar* or SSB or "unhealthy food*") adj3 tax*) or nudg* or ((food* or eat* or feed* or meal* or diet*) adj4 (deci* or ((cultur* or social) adj3 (norm* or preferen*))) or "ration shop*" or "farmer* market*" or "food desert*" or ((food or grocer*) adj3 retail* adj3 (tax* or subsid* or incentiv*)) or (school* adj4 (meal* or feed* or food* or lunch*))).ti,ab,kw. (14797)
- 10 (((food* or consumer*) adj4 (subsid* or "price control*")) or (food* adj4 (cash or "social assistance" or "social safety net" or voucher* or welfare)).ti,ab,kw. (1031)
- 11 ((food* adj4 ((advertis* or label* or market*) adj3 (ban* or restrict* or regulat* or polic* or law* or legislat*))) or ((supermarket or ((food* or grocer* or convenience or corner) adj1 (store* or market*))) adj4 (design* or redesign* or re-design* or layout* or innovat*)) or (front adj3 pack* adj3 label*).ti,ab,kw. (1129)
- 12 Food Labeling/ (10252)
- 13 ((food* adj3 (safe* or quality) adj3 (regulat* or restrict* or polic* or law* or legislat* or inspect*)) or (food* adj3 certif*).ti,ab,kw. (1310)
- 14 food safety/ or food inspection/ (40214)
- 15 (cook* or ((meal* or food*) adj3 prepar*) or (wom?n adj4 (food* or eat* or feed* or meal* or diet*) adj4 (empower* or deci*)) or ((food* or eat* or feed* or breastfeed* or "breast feed*" or meal* or diet* or "F&V") adj4 (inform* or educat* or promot* or campaign* or media or initiative* or (peer adj1 (counsel* or support)) or (community adj3 (meet* or class* or engag* or participat*)) or "door-to-door*))).ti,ab,kw. (95892)
- 16 (Community Participation/ or Feeding Behavior/) and (Breast Feeding/ or food/ or meals/ or diet, healthy/) (7794)
- 17 ("farm* field school*" or (farm* adj3 (train* or (build adj3 capacity))) or "demonstration plot*" or ((agricultur* or rural) adj1 extension) or (farm* adj3 educat*) or (farm* adj3 (organi?ation* or group* or cooperative* or co-op* or club*)) or (("social protection" or microfinance or "micro finance" or microloan* or "micro loan*") adj4 (farm* or smallholder* or agricultur*))).ti,ab,kw. (2833)
- 18 or/2-17 (479418)
- 19 (random* or experiment* or (match* adj2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment"

or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV adj2 (estimation or approach)) or regression discontinuity or time series or segment* regression or (non adj2 participant*) or ((control or comparison) adj2 (group* or condition* or area* or intervention)).ti,ab,kw. (4483120)

20 randomized controlled trial/ or equivalence trial/ or pragmatic clinical trial/ or meta-analysis/ or propensity score/ or Interrupted Time Series Analysis/ or control groups/ or random allocation/ (1193928)

21 ("systematic review" or "literature review").ti,ab,kw. (302896)

22 "systematic review"/ or "Review Literature as Topic"/ (289396)

23 or/19-22 (5144942)

24 1 and 18 and 23 (15886)

25 limit 24 to yr="2000 -Current" (14369)

26 limit 25 to embase (7216)

27 limit 26 to exclude medline journals (1638)

World Health Organization Global Index Medicus – Searched 28th May 2020

(tw:(("food system" or "food systems" or farm or farms or farming)) AND (tw:((random* or experiment* or (match* AND (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment" or "systematic review" or "literature review") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV AND (estimation or approach)) or "regression discontinuity" or "time series" or "segment* regression" or (non AND participant*) or ((control or comparison) AND (group* or condition* or area* or intervention)))))) – 2047 hits

Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R) <1946 to May 22, 2020> - Searched 27th May 2020

1 (random* or experiment* or (match* adj2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV adj2 (estimation or approach)) or regression discontinuity or time series or segment* regression or (non adj2 participant*) or ((control or comparison) adj2 (group* or condition* or area* or intervention)).ti,ab,kw. (3518882)

2 Randomized Controlled Trial/ or Random Allocation/ or Evaluation Studies/ or Propensity Score/ or Interrupted Time Series Analysis/ or Controlled Before-After Studies/ or Controlled Clinical Trial/ or Non-Randomized Controlled Trials as Topic/ (935658)

3 1 or 2 (3938796)

4 Systematic Review/ (127969)

5 (systematic review or meta-analysis).pt. (189882)
6 cochrane database of systematic reviews.jn. (14833)
7 (systematic review or literature review or meta-analy* or metaanaly* or meta
analy*).ti. (221241)
8 5 or 6 or 7 (276569)
9 3 or 8 (4104305)
10 Africa/ or Asia/ or Caribbean/ or West Indies/ or South America/ or Latin
America/ or Central America/ (76408)
11 (afghanistan or albania or algeria or "american samoa" or angola or "antigua
and barbuda" or antigua or barbuda or argentina or armenia or armenian or aruba or
azerbaijan or bahrain or bangladesh or barbados or belarus or byelarus or belorussia
or byelorussian or belize or "british honduras" or benin or dahomey or bhutan or
bolivia or "bosnia and herzegovina" or bosnia or herzegovina or botswana or
bechuanaland or brazil or brasil or bulgaria or "burkina faso" or "burkina fasso" or
"upper volta" or burundi or urundi or "cabo verde" or "cape verde" or cambodia or
kampuchea or "khmer republic" or cameroon or cameron or cameroun or "central
african republic" or "ubangi shari" or chad or chile or china or colombia or comoros or
"comoro islands" or "iles comores" or mayotte or "democratic republic of the congo"
or "democratic republic congo" or congo or zaire or "costa rica" or "cote d'ivoire" or
"cote d'ivoire" or "cote divoire" or "cote d ivoire" or "ivory coast" or croatia or cuba or
cyprus or "czech republic" or czechoslovakia or djibouti or "french somaliland" or
dominica or "dominican republic" or ecuador or egypt or "united arab republic" or "el
salvador" or "equatorial guinea" or "spanish guinea" or eritrea or estonia or eswatini
or swaziland or ethiopia or fiji or gabon or "gabonese republic" or gambia or "georgia
(republic)" or georgian or ghana or "gold coast" or gibraltar or greece or grenada or
guam or guatemala or guinea or "guinea bissau" or guyana or "british guiana" or haiti
or hispaniola or honduras or hungary or india or indonesia or timor or iran or iraq or
"isle of man" or jamaica or jordan or kazakhstan or kazakh or kenya or "democratic
people's republic of korea" or "republic of korea" or "north korea" or "south korea" or
korea or kosovo or kyrgyzstan or kirghizia or kirgizstan or "kyrgyz republic" or kirghiz
or laos or "lao pdr" or "lao people's democratic republic" or latvia or lebanon or
"lebanese republic" or lesotho or basutoland or liberia or libya or "libyan arab
jamahiriya" or lithuania or macau or macao or "macedonia (republic)" or macedonia
or madagascar or "malagasy republic" or malawi or niasaland or malaysia or "malay
federation" or "malaya federation" or maldives or "indian ocean islands" or "indian
ocean" or mali or malta or micronesia or "federated states of micronesia" or kiribati or
"marshall islands" or nauru or "northern mariana islands" or palau or tuvalu or
mauritania or mauritius or mexico or moldova or moldovian or mongolia or
montenegro or morocco or ifni or mozambique or "portuguese east africa" or
myanmar or burma or namibia or nepal or "netherlands antilles" or nicaragua or niger
or nigeria or oman or muscat or pakistan or panama or "papua new guinea" or "new
guinea" or paraguay or peru or philippines or philipines or philippines or philippines
or poland or "polish people's republic" or portugal or "portuguese republic" or "puerto
rico" or romania or russia or "russian federation" or ussr or "soviet union" or "union of
soviet socialist republics" or rwanda or ruanda or samoa or "pacific islands" or
polynesia or "samoan islands" or "navigator island" or "navigator islands" or "sao
tome and principe" or "saudi arabia" or senegal or serbia or seychelles or "sierra
leone" or slovakia or "slovak republic" or slovenia or melanesia or "solomon island"
or "solomon islands" or "norfolk island" or "norfolk islands" or somalia or "south
africa" or "south sudan" or "sri lanka" or ceylon or "saint kitts and nevis" or "st. kitts
and nevis" or "saint lucia" or "st. lucia" or "saint vincent and the grenadines" or "saint
vincent" or "st. vincent" or grenadines or sudan or suriname or surinam or "dutch

guiana" or "netherlands guiana" or syria or "syrian arab republic" or tajikistan or tadjikistan or tadjikistan or tadjik or tanzania or tanganyika or thailand or siam or "timor leste" or "east timor" or togo or "togolese republic" or tonga or "trinidad and tobago" or trinidad or tobago or tunisia or turkey or "turkey (republic)" or turkmenistan or turkmen or uganda or ukraine or uruguay or uzbekistan or uzbek or vanuatu or "new hebrides" or venezuela or vietnam or "viet nam" or "middle east" or "west bank" or gaza or palestine or yemen or yugoslavia or zambia or zimbabwe or "northern rhodesia" or "global south" or "africa south of the sahara" or "sub-saharan africa" or "subsaharan africa" or "africa, central" or "central africa" or "africa, northern" or "north africa" or "northern africa" or magreb or maghrib or sahara or "africa, southern" or "southern africa" or "africa, eastern" or "east africa" or "eastern africa" or "africa, western" or "west africa" or "western africa" or "west indies" or "indian ocean islands" or caribbean or "central america" or "latin america" or "south and central america" or "south america" or "asia, central" or "central asia" or "asia, northern" or "north asia" or "northern asia" or "asia, southeastern" or "southeastern asia" or "south eastern asia" or "southeast asia" or "south east asia" or "asia, western" or "western asia" or "europe, eastern" or "east europe" or "eastern europe" or "developing country" or "developing countries" or "developing nation*" or "developing population*" or "developing world" or "less developed countr*" or "less developed nation*" or "less developed population*" or "less developed world" or "lesser developed countr*" or "lesser developed nation*" or "lesser developed population*" or "lesser developed world" or "under developed countr*" or "under developed nation*" or "under developed population*" or "under developed world" or "underdeveloped countr*" or "underdeveloped nation*" or "underdeveloped population*" or "underdeveloped world" or "middle income countr*" or "middle income nation*" or "middle income population*" or "low income countr*" or "low income nation*" or "low income population*" or "lower income countr*" or "lower income nation*" or "lower income population*" or "underserved countr*" or "underserved nation*" or "underserved population*" or "underserved world" or "under served countr*" or "under served nation*" or "under served population*" or "under served world" or "deprived countr*" or "deprived nation*" or "deprived population*" or "deprived world" or "poor countr*" or "poor nation*" or "poor population*" or "poor world" or "poorer countr*" or "poorer nation*" or "poorer population*" or "poorer world" or "developing econom*" or "less developed econom*" or "lesser developed econom*" or "under developed econom*" or "underdeveloped econom*" or "middle income econom*" or "low income econom*" or "lower income econom*" or "low gdp" or "low gnp" or "low gross domestic" or "low gross national" or "lower gdp" or "lower gnp" or "lower gross domestic" or "lower gross national" or lmic or lmic* or "third world" or "lami countr*" or "transitional countr*" or "emerging econom*" or "emerging nation*").ti,ab,kw,sh. (1891302)

12 or/10-11 (1912281)

13 9 and 12 (239411)

14 Agriculture/ or Agricultural Irrigation/ or Animal Husbandry/ or Aquaculture/ or Beekeeping/ or Crop Production/ or Crop Protection/ or Dairying/ or Domestication/ or Farms/ or Gardens/ or Horticulture/ or Hydroponics/ or Organic Agriculture/ or Weed Control/ or Food Assistance/ or Food Packaging/ or Edible Films/ or Food Labeling/ or Food Preservation/ or Food Storage/ or Food-Processing Industry/ or Meat-Packing Industry/ or Abattoirs/ or Food Quality/ or Food Safety/ or Food Contamination/ or Food Inspection/ or Hazard Analysis Critical Control Points/ or Nutritive Value/ or Glycemic Index/ or Glycemic Load/ or Nutrition Policy/ or Recommended Dietary Allowances/ or Nutrition Therapy/ or Diet Therapy/ or Nutritional Support/ (201674)

- 15 (((farm* field school* or (farm* adj3 (train* or (build adj3 capacity))) or demonstration plot* or ((agricultur* or rural) adj extension) or farm*) adj3 educat*) or (farm* adj3 (organi#ation* or group* or cooperative* or co-op* or club*)) or (("social protection" or microfinance or "micro finance" or microloan* or "micro loan*") adj4 (farm* or smallholder* or agricultur*))).ti,ab,kw. (1986)
- 16 ((Food adj3 (system or produc*)) or (agricultur* adj3 produc*) or aquacultur* or fisher* or livestock* or ((kitchen or home*) adj3 (farm* or garden*)) or "nutrition-sensitive" or (improv* adj3 (seed* or variet* or crop*)) or (genetic* adj modif* adj (food* or organism*)) or GMO* or ((compost* or manure* or mulch* or fertili* or pesticid* or insecticid*) adj3 (appl* or spray* or spread* or "use" or usage)) or ((drought* or pest* or insect*) adj3 (toleran* or resist*)) or (rotat* adj3 crop*) or (land adj3 manage*) or "fixed distance planting" or (plant* adj3 row?) or ((farm* or crop or agricultur*) adj6 subsid*) or (price* adj6 purchas* adj6 guarantee*) or ((agricultur* or crop* or rain* or weather or index) adj6 insurance) or (irrigat* adj6 (project* or program* or access* or improv*)) or "water meter*" or (rain* adj3 (fed or feed*)) or (trench* adj3 hill*) or hilling or contour bund* or zai or "water break" or terrac* or ((farm* or agricultur*) adj3 (mechani#e* or mechani#ation*)) or intercrop* or (companion adj3 (plant* or variet* or species)) or "integrated soil fertility management" or ISFM or (pest adj3 manage*).ti,ab,kw. (173639)
- 17 (((grain* or crop* or agricultur* or aquacultur* or farm* or produce) adj6 (silo* or stor* or shed* or warehous*)) or ((agricultur* or farm*) adj3 (collect* or distribut*) adj3 (centre* or center* or point* or hub*)) or ((farm* or produce or food* or agricultur*) adj6 ("cold chain*" or ((refrigerat* or cold) adj3 (truck* or transport* or transit)))) or ((import? or importation or export*) adj6 (tariff* or quota* or ban* or restrict* or regulat*)) or "trade agreement*).ti,ab,kw. (7549)
- 18 (((food* or crop* or staple*) adj3 (fortif* or biofortif*)) or ((recycl* or compost* or biodegrad* or plastic*) adj3 (pack* or sache*)) or (post-harvest adj6 (clean* or winnow* or cann* or mill* or thresh* or hull*)) or ((food* or crop* or grain*) adj3 dry*).ti,ab,kw. (6297)
- 19 ((food adj3 (loss* or wast*)) or ((food* or grocer* or soup) adj6 (donat* or pantr* or bank* or kitchen* or transfer*)) or (food* adj6 near* adj6 spoil*).ti,ab,kw. (7160)
- 20 ("food environment*" or (zoning and (food* adj3 (security or access*))) or ((sugar* or SSB or "unhealthy food*") adj3 tax*) or nudg* or ((food* or eat* or feed* or meal* or diet*) adj6 (deci* or ((cultur* or social) adj3 (norm* or preferen*)))) or "ration shop*" or "farmer* market*" or "food desert*" or ((food or grocer*) adj3 retail* adj3 (tax* or subsid* or incentiv*)) or (school* adj6 (meal* or feed* or food* or lunch*))).ti,ab,kw. (14173)
- 21 (((food* or consumer*) adj6 (subsid* or "price control*")) or (food* adj6 (cash or "social assistance" or "social safety net" or voucher* or welfare)).ti,ab,kw. (1183)
- 22 ((food* adj6 ((advertis* or label* or market*) adj3 (ban* or restrict* or regulat* or polic* or law* or legislat*))) or ((supermarket or ((food* or grocer* or convenience or corner) adj (store* or market*))) adj6 (design* or redesign* or re-design* or layout* or innovat*)) or (front adj3 pack* adj3 label*).ti,ab,kw. (980)
- 23 ((food* adj3 (safe* or quality) adj3 (regulat* or restrict* or polic* or law* or legislat* or inspect*)) or (food* adj3 certif*).ti,ab,kw. (1214)
- 24 (cook* or ((meal* or food*) adj3 prepar*) or (wom#n adj6 (food* or eat* or feed* or meal* or diet*) adj6 (empower* or deci*)) or ((food* or eat* or feed* or breastfeed* or "breast feed*" or meal* or diet* or "F&V") adj6 (inform* or educat* or promot* or campaign* or media or initiative* or (peer adj (counsel* or support)) or (community adj3 (meet* or class* or engag* or participat*)) or "door-to-door*))).ti,ab,kw. (87360)
- 25 or/14-24 (450525)
- 26 13 and 25 (14487)

27 limit 26 to yr="2000 -Current" (13314)

Global Health <1910 to 2020 Week 20> (Ovid) - Searched 27th May 2020

- 1 (((farm* field school* or (farm* adj3 (train* or (build adj3 capacity))) or demonstration plot* or ((agricultur* or rural) adj extension) or farm*) adj3 educat*) or (farm* adj3 (organi#ation* or group* or cooperative* or co-op* or club*)) or (("social protection" or microfinance or "micro finance" or microloan* or "micro loan*") adj4 (farm* or smallholder* or agricultur*))).ti,ab,hw. (2027)
- 2 ((Food adj3 (system or produc*) or (agricultur* adj3 produc*) or aquacultur* or fisher* or livestock* or ((kitchen or home*) adj3 (farm* or garden*)) or "nutrition-sensitive" or (improv* adj3 (seed* or variet* or crop*)) or (genetic* adj3 modif* adj (food* or organism*)) or GMO* or ((compost* or manure* or mulch* or fertili* or pesticid* or insecticid*) adj3 (appl* or spray* or spread* or "use" or usage)) or ((drought* or pest* or insect*) adj3 (toleran* or resist*)) or (rotat* adj3 crop*) or (land adj3 manage*) or "fixed distance planting" or (plant* adj3 row?) or ((farm* or crop or agricultur*) adj6 subsid*) or (price* adj6 purchas* adj6 guarantee*) or ((agricultur* or crop* or rain* or weather or index) adj6 insurance) or (irrigat* adj6 (project* or program* or access* or improv*)) or "water meter*" or (rain* adj3 (fed or feed*)) or (trench* adj3 hill*) or hilling or contour bund* or zai or "water break" or terrac* or ((farm* or agricultur*) adj3 (mechani#e* or mechani#ation*)) or intercrop* or (companion adj3 (plant* or variet* or species)) or "integrated soil fertility management" or ISFM or (pest adj3 manage*).ti,ab,hw. (140426)
- 3 (((grain* or crop* or agricultur* or aquacultur* or farm* or produce) adj6 (silo* or stor* or shed* or warehous*)) or ((agricultur* or farm*) adj3 (collect* or distribut*) adj3 (centre* or center* or point* or hub*)) or ((farm* or produce or food* or agricultur*) adj6 ("cold chain*" or ((refrigerat* or cold) adj3 (truck* or transport* or transit)))) or ((import? or importation or export*) adj6 (tariff* or quota* or ban* or restrict* or regulat*)) or "trade agreement*).ti,ab,hw. (5724)
- 4 (((food* or crop* or staple*) adj3 (fortif* or biofortif*)) or ((recycl* or compost* or biodegrad* or plastic*) adj3 (pack* or sache*)) or (post-harvest adj6 (clean* or winnow* or cann* or mill* or thresh* or hull*)) or ((food* or crop* or grain*) adj3 dry*).ti,ab,hw. (6336)
- 5 ((food adj3 (loss* or wast*)) or ((food* or grocer* or soup) adj6 (donat* or pantr* or bank* or kitchen* or transfer*)) or (food* adj6 near* adj6 spoil*).ti,ab,hw. (7942)
- 6 ("food environment*" or (zoning and (food* adj3 (security or access*))) or ((sugar* or SSB or "unhealthy food*") adj3 tax*) or nudg* or ((food* or eat* or feed* or meal* or diet*) adj6 (deci* or ((cultur* or social) adj3 (norm* or preferen*))) or "ration shop*" or "farmer* market*" or "food desert*" or ((food or grocer*) adj3 retail* adj3 (tax* or subsid* or incentiv*)) or (school* adj6 (meal* or feed* or food* or lunch*))).ti,ab,hw. (14640)
- 7 (((food* or consumer*) adj6 (subsid* or "price control*")) or (food* adj6 (cash or "social assistance" or "social safety net" or voucher* or welfare))).ti,ab,hw. (2018)
- 8 ((food* adj6 ((advertis* or label* or market*) adj3 (ban* or restrict* or regulat* or polic* or law* or legislat*))) or ((supermarket or ((food* or grocer* or convenience or corner) adj (store* or market*))) adj6 (design* or redesign* or re-design* or layout* or innovat*)) or (front adj3 pack* adj3 label*).ti,ab,hw. (1337)

- 9 ((food* adj3 (safe* or quality) adj3 (regulat* or restrict* or polic* or law* or legislat* or inspect*)) or (food* adj3 certif*)).ti,ab,hw. (2759)
- 10 (cook* or ((meal* or food*) adj3 prepar*) or (wom#n adj6 (food* or eat* or feed* or meal* or diet*) adj6 (empower* or deci*)) or ((food* or eat* or feed* or breastfeed* or "breast feed*" or meal* or diet* or "F&V") adj6 (inform* or educat* or promot* or campaign* or media or initiative* or (peer adj (counsel* or support)) or (community adj3 (meet* or class* or engag* or participat*)) or "door-to-door"))).ti,ab,hw. (90449)
- 11 agriculture/ or agricultural production/ or agricultural trade/ or irrigation/ or pest management/ or fertilizers/ or organic fertilizers/ or inorganic fertilizers/ or soil fertility/ or soil quality/ or genetically engineered organisms/ or grain/ or cereal grains/ or feed grains/ or food grains/ or crops/ or cash crops/ or companion crops/ or cover crops/ or food crops/ or grain crops/ or green manures/ or horticultural crops/ or intercrops/ or nut crops/ or root crops/ or seed crops/ or starch crops/ or sugar crops/ or crop damage/ or crop density/ or crop insurance/ or crop losses/ or crop management/ or crop quality/ or intensive cropping/ or rowcrops/ or vegetables/ or bulbous vegetables/ or fruit vegetables/ or leafy vegetables/ or root vegetables/ or stem vegetables/ or mushrooms/ or vegetable growing/ or livestock farming/ or aquaculture/ or cattle farming/ or goat keeping/ or pig farming/ or poultry farming/ or sheep farming/ or farmers' associations/ or farming systems/ or farms/ or food/ or foods/ or food products/ or food consumption/ or food cooperatives/ or food distribution programs/ or food grades/ or food groups/ or food marketing/ or food preparation/ or recipes/ or food purchasing/ or food shortages/ or food storage/ or food stores/ or foodways/ or food serving methods/ or food beliefs/ or food packaging/ or food preservation/ or food technology/ or food industry/ or food processing/ or food access/ or food security/ or food costs/ or food supply/ or food quality/ or food acceptability/ or food safety/ or food contamination/ or food supplements/ or functional foods/ or supplementary feeding/ or diet/ or dietary guidelines/ or meals/ or diet counselling/ or nutrient sources/ or breast feeding/ or infant foods/ or weaning/ or food policy/ or agricultural policy/ or agricultural planning/ or agricultural prices/ or agricultural financial policy/ or food legislation/ or nutrition/ or community nutrition/ or nutrition education/ or nutrition information/ or nutrition knowledge/ or nutrition labelling/ or nutrition planning/ or nutritional adequacy/ or nutritional disorders/ or nutritional intervention/ or nutritional support/ or nutritive value/ or malnutrition/ or maternal nutrition/ or child nutrition/ or elderly nutrition/ (588595)
- 12 or/1-11 (696663)
- 13 (afghanistan or albania or algeria or "american samoa" or angola or "antigua and barbuda" or antigua or barbuda or argentina or armenia or armenian or aruba or azerbaijan or bahrain or bangladesh or barbados or belarus or byelarus or belorussia or byelorussian or belize or "british honduras" or benin or dahomey or bhutan or bolivia or "bosnia and herzegovina" or bosnia or herzegovina or botswana or bechuanaland or brazil or brasil or bulgaria or "burkina faso" or "burkina fasso" or "upper volta" or burundi or urundi or "cabo verde" or "cape verde" or cambodia or kampuchea or "khmer republic" or cameroon or cameron or cameroun or "central african republic" or "ubangi shari" or chad or chile or china or colombia or comoros or "comoro islands" or "iles comores" or mayotte or "democratic republic of the congo" or "democratic republic congo" or congo or zaire or "costa rica" or "cote d'ivoire" or "cote d'ivoire" or "cote divoire" or "cote d ivoire" or "ivory coast" or croatia or cuba or cyprus or "czech republic" or czechoslovakia or djibouti or "french somaliland" or dominica or "dominican republic" or ecuador or egypt or "united arab republic" or "el salvador" or "equatorial guinea" or "spanish guinea" or eritrea or estonia or eswatini or swaziland or ethiopia or fiji or gabon or "gabonese republic" or gambia or "georgia

(republic)" or georgian or ghana or "gold coast" or gibraltar or greece or grenada or guam or guatemala or guinea or "guinea bissau" or guyana or "british guiana" or haiti or hispaniola or honduras or hungary or india or indonesia or timor or iran or iraq or "isle of man" or jamaica or jordan or kazakhstan or kazakh or kenya or "democratic people's republic of korea" or "republic of korea" or "north korea" or "south korea" or korea or kosovo or kyrgyzstan or kirghizia or kirgizstan or "kyrgyz republic" or kirghiz or laos or "lao pdr" or "lao people's democratic republic" or latvia or lebanon or "lebanese republic" or lesotho or basutoland or liberia or libya or "libyan arab jamahiriya" or lithuania or macau or macao or "macedonia (republic)" or macedonia or madagascar or "malagasy republic" or malawi or nyasaland or malaysia or "malay federation" or "malaya federation" or maldives or "indian ocean islands" or "indian ocean" or mali or malta or micronesia or "federated states of micronesia" or kiribati or "marshall islands" or nauru or "northern mariana islands" or palau or tuvalu or mauritania or mauritius or mexico or moldova or moldovian or mongolia or montenegro or morocco or ifni or mozambique or "portuguese east africa" or myanmar or burma or namibia or nepal or "netherlands antilles" or nicaragua or niger or nigeria or oman or muscat or pakistan or panama or "papua new guinea" or "new guinea" or paraguay or peru or philippines or philipines or philippines or philippines or poland or "polish people's republic" or portugal or "portuguese republic" or "puerto rico" or romania or russia or "russian federation" or ussr or "soviet union" or "union of soviet socialist republics" or rwanda or ruanda or samoa or "pacific islands" or polynesia or "samoan islands" or "navigator island" or "navigator islands" or "sao tome and principe" or "saudi arabia" or senegal or serbia or seychelles or "sierra leone" or slovakia or "slovak republic" or slovenia or melanesia or "solomon island" or "solomon islands" or "norfolk island" or "norfolk islands" or somalia or "south africa" or "south sudan" or "sri lanka" or ceylon or "saint kitts and nevis" or "st. kitts and nevis" or "saint lucia" or "st. lucia" or "saint vincent and the grenadines" or "saint vincent" or "st. vincent" or grenadines or sudan or suriname or surinam or "dutch guiana" or "netherlands guiana" or syria or "syrian arab republic" or tajikistan or tadjikistan or tadjhikistan or tadjhik or tanzania or tanganyika or thailand or siam or "timor leste" or "east timor" or togo or "togoese republic" or tonga or "trinidad and tobago" or trinidad or tobago or tunisia or turkey or "turkey (republic)" or turkmenistan or turkmen or uganda or ukraine or uruguay or uzbekistan or uzbek or vanuatu or "new hebrides" or venezuela or vietnam or "viet nam" or "middle east" or "west bank" or gaza or palestine or yemen or yugoslavia or zambia or zimbabwe or "northern rhodesia" or "global south" or "africa south of the sahara" or "sub-saharan africa" or "subsaharan africa" or "africa, central" or "central africa" or "africa, northern" or "north africa" or "northern africa" or magreb or maghrib or sahara or "africa, southern" or "southern africa" or "africa, eastern" or "east africa" or "eastern africa" or "africa, western" or "west africa" or "western africa" or "west indies" or "indian ocean islands" or caribbean or "central america" or "latin america" or "south and central america" or "south america" or "asia, central" or "central asia" or "asia, northern" or "north asia" or "northern asia" or "asia, southeastern" or "southeastern asia" or "south eastern asia" or "southeast asia" or "south east asia" or "asia, western" or "western asia" or "europe, eastern" or "east europe" or "eastern europe" or "developing country" or "developing countries" or "developing nation*" or "developing population*" or "developing world" or "less developed countr*" or "less developed nation*" or "less developed population*" or "less developed world" or "lesser developed countr*" or "lesser developed nation*" or "lesser developed population*" or "lesser developed world" or "under developed countr*" or "under developed population*" or "under developed world" or "underdeveloped countr*" or "underdeveloped nation*" or "underdeveloped

population*" or "underdeveloped world" or "middle income countr*" or "middle income nation*" or "middle income population*" or "low income countr*" or "low income nation*" or "low income population*" or "lower income countr*" or "lower income nation*" or "lower income population*" or "underserved countr*" or "underserved nation*" or "underserved population*" or "underserved world" or "under served countr*" or "under served nation*" or "under served population*" or "under served world" or "deprived countr*" or "deprived nation*" or "deprived population*" or "deprived world" or "poor countr*" or "poor nation*" or "poor population*" or "poor world" or "poorer countr*" or "poorer nation*" or "poorer population*" or "poorer world" or "developing econom*" or "less developed econom*" or "lesser developed econom*" or "under developed econom*" or "underdeveloped econom*" or "middle income econom*" or "low income econom*" or "lower income econom*" or "low gdp" or "low gnp" or "low gross domestic" or "low gross national" or "lower gdp" or "lower gnp" or "lower gross domestic" or "lower gross national" or lmic or lmicr or "third world" or "lami countr*" or "transitional countr*" or "emerging econom*" or "emerging nation*").ti,ab,gl. (1187525)

14 exp africa/ or exp central america/ or exp latin america/ or exp south america/ or mexico/ or exp central asia/ or east asia/ or china/ or korea democratic people's republic/ or korea republic/ or mongolia/ or exp south asia/ or himalaya/ or exp south east asia/ or pacific rim/ or exp caribbean/ or exp pacific islands/ or exp developing countries/ (1094900)

15 or/13-14 (1289174)

16 (random* or experiment* or (match* adj2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV adj2 (estimation or approach)) or regression discontinuity or time series or segment* regression or (non adj2 participant*) or ((control or comparison) adj2 (group* or condition* or area* or intervention))).ti,ab,hw. (646728)

17 randomized controlled trials/ or program evaluation/ or time series/ or regression analysis/ (45875)

18 16 or 17 (650539)

19 ("cochrane database of systematic reviews" or "campbell systematic reviews").jn. (483)

20 systematic reviews/ or meta-analysis/ (43100)

21 (systematic review or literature review or meta-analy* or metaanaly* or meta analy*).ti. (39848)

22 19 or 20 or 21 (50461)

23 18 or 22 (681090)

24 15 and 23 (184934)

25 12 and 24 (30645)

26 limit 25 to yr="2000 -Current" (24575)

APA PsycInfo <1806 to May Week 3 2020> (Ovid) - Searched 27th May 2020

- 1 (((farm* field school* or (farm* adj3 (train* or (build adj3 capacity))) or demonstration plot* or ((agricultur* or rural) adj extension) or farm*) adj3 educat*) or (farm* adj3 (organi#ation* or group* or cooperative* or co-op* or club*)) or (("social protection" or microfinance or "micro finance" or microloan* or "micro loan*") adj4 (farm* or smallholder* or agricultur*))).ti,ab,hw. (408)
- 2 ((Food adj3 (system or produc*)) or (agricultur* adj3 produc*) or aquacultur* or fisher* or livestock* or ((kitchen or home*) adj3 (farm* or garden*)) or "nutrition-sensitive" or (improv* adj3 (seed* or variet* or crop*)) or (genetic* adj modif* adj (food* or organism*)) or GMO* or ((compost* or manure* or mulch* or fertili* or pesticid* or insecticid*) adj3 (appl* or spray* or spread* or "use" or usage)) or ((drought* or pest* or insect*) adj3 (toleran* or resist*)) or (rotat* adj3 crop*) or (land adj3 manage*) or "fixed distance planting" or (plant* adj3 row?) or ((farm* or crop or agricultur*) adj6 subsid*) or (price* adj6 purchas* adj6 guarantee*) or ((agricultur* or crop* or rain* or weather or index) adj6 insurance) or (irrigat* adj6 (project* or program* or access* or improv*)) or "water meter*" or (rain* adj3 (fed or feed*)) or (trench* adj3 hill*) or hilling or contour bund* or zai or "water break" or terrac* or ((farm* or agricultur*) adj3 (mechani#e* or mechani#ation*)) or intercrop* or (companion adj3 (plant* or variet* or species)) or "integrated soil fertility management" or ISFM or (pest adj3 manage*)).ti,ab,hw. (11591)
- 3 (((grain* or crop* or agricultur* or aquacultur* or farm* or produce) adj6 (silo* or stor* or shed* or warehous*)) or ((agricultur* or farm*) adj3 (collect* or distribut*) adj3 (centre* or center* or point* or hub*)) or ((farm* or produce or food* or agricultur*) adj6 ("cold chain*" or ((refrigerat* or cold) adj3 (truck* or transport* or transit)))) or ((import? or importation or export*) adj6 (tariff* or quota* or ban* or restrict* or regulat*)) or "trade agreement*").ti,ab,hw. (687)
- 4 (((food* or crop* or staple*) adj3 (fortif* or biofortif*)) or ((recycl* or compost* or biodegrad* or plastic*) adj3 (pack* or sache*)) or (post-harvest adj6 (clean* or winnow* or cann* or mill* or thresh* or hull*)) or ((food* or crop* or grain*) adj3 dry*)).ti,ab,hw. (277)
- 5 ((food adj3 (loss* or wast*)) or ((food* or grocer* or soup) adj6 (donat* or pantr* or bank* or kitchen* or transfer*)) or (food* adj6 near* adj6 spoil*).ti,ab,hw. (1030)
- 6 ("food environment*" or (zoning and (food* adj3 (security or access*))) or ((sugar* or SSB or "unhealthy food*") adj3 tax*) or nudg* or ((food* or eat* or feed* or meal* or diet*) adj6 (deci* or ((cultur* or social) adj3 (norm* or preferen*)))) or "ration shop*" or "farmer* market*" or "food desert*" or ((food or grocer*) adj3 retail* adj3 (tax* or subsid* or incentiv*)) or (school* adj6 (meal* or feed* or food* or lunch*))).ti,ab,hw. (7864)
- 7 (((food* or consumer*) adj6 (subsid* or "price control*")) or (food* adj6 (cash or "social assistance" or "social safety net" or voucher* or welfare))).ti,ab,hw. (308)
- 8 ((food* adj6 ((advertis* or label* or market*) adj3 (ban* or restrict* or regulat* or polic* or law* or legislat*))) or ((supermarket or ((food* or grocer* or convenience or corner) adj (store* or market*))) adj6 (design* or redesign* or re-design* or layout* or innovat*)) or (front adj3 pack* adj3 label*).ti,ab,hw. (279)
- 9 ((food* adj3 (safe* or quality) adj3 (regulat* or restrict* or polic* or law* or legislat* or inspect*)) or (food* adj3 certif*).ti,ab,hw. (96)
- 10 (cook* or ((meal* or food*) adj3 prepar*) or (wom#n adj6 (food* or eat* or feed* or meal* or diet*) adj6 (empower* or deci*)) or ((food* or eat* or feed* or breastfeed* or "breast feed*" or meal* or diet* or "F&V") adj6 (inform* or educat* or promot* or campaign* or media or initiative* or (peer adj (counsel* or support)) or (community adj3 (meet* or class* or engag* or participat*)) or "door-to-door*))).ti,ab,hw. (23250)
- 11 Food/ or Food Deprivation/ or Food Intake/ or Food Preferences/ or Food Preparation/ or Food Safety/ or Nutrition/ or Nutritional Deficiencies/ or Eating

Behavior/ or Eating Attitudes/ or Mealtimes/ or Diets/ or Agriculture/ or Agriculture Extension Workers/ or Agricultural Workers/ or Consumer Behavior/ (89721)

12 or/1-11 (119619)

13 (afghanistan or albania or algeria or "american samoa" or angola or "antigua and barbuda" or antigua or barbuda or argentina or armenia or armenian or aruba or azerbaijan or bahrain or bangladesh or barbados or belarus or byelarus or belorussia or byelorussian or belize or "british honduras" or benin or dahomey or bhutan or bolivia or "bosnia and herzegovina" or bosnia or herzegovina or botswana or bechuanaland or brazil or brasil or bulgaria or "burkina faso" or "burkina fasso" or "upper volta" or burundi or urundi or "cabo verde" or "cape verde" or cambodia or kampuchea or "khmer republic" or cameroon or cameron or cameroun or "central african republic" or "ubangi shari" or chad or chile or china or colombia or comoros or "comoro islands" or "iles comores" or mayotte or "democratic republic of the congo" or "democratic republic congo" or congo or zaire or "costa rica" or "cote d'ivoire" or "cote d'ivoire" or "cote divoire" or "cote d ivoire" or "ivory coast" or croatia or cuba or cyprus or "czech republic" or czechoslovakia or djibouti or "french somaliland" or dominica or "dominican republic" or ecuador or egypt or "united arab republic" or "el salvador" or "equatorial guinea" or "spanish guinea" or eritrea or estonia or eswatini or swaziland or ethiopia or fiji or gabon or "gabonese republic" or gambia or "georgia (republic)" or georgian or ghana or "gold coast" or gibraltar or greece or grenada or guam or guatemala or guinea or "guinea bissau" or guyana or "british guiana" or haiti or hispaniola or honduras or hungary or india or indonesia or timor or iran or iraq or "isle of man" or jamaica or jordan or kazakhstan or kazakh or kenya or "democratic people's republic of korea" or "republic of korea" or "north korea" or "south korea" or korea or kosovo or kyrgyzstan or kirghizia or kirgizstan or "kyrgyz republic" or kirghiz or laos or "lao pdr" or "lao people's democratic republic" or latvia or lebanon or "lebanese republic" or lesotho or basutoland or liberia or libya or "libyan arab jamahiriya" or lithuania or macau or macao or "macedonia (republic)" or macedonia or madagascar or "malagasy republic" or malawi or niasaland or malaysia or "malay federation" or "malaya federation" or maldives or "indian ocean islands" or "indian ocean" or mali or malta or micronesia or "federated states of micronesia" or kiribati or "marshall islands" or nauru or "northern mariana islands" or palau or tuvalu or mauritania or mauritius or mexico or moldova or moldovian or mongolia or montenegro or morocco or ifni or mozambique or "portuguese east africa" or myanmar or burma or namibia or nepal or "netherlands antilles" or nicaragua or niger or nigeria or oman or muscat or pakistan or panama or "papua new guinea" or "new guinea" or paraguay or peru or philippines or philippines or philippines or philippines or poland or "polish people's republic" or portugal or "portuguese republic" or "puerto rico" or romania or russia or "russian federation" or ussr or "soviet union" or "union of soviet socialist republics" or rwanda or ruanda or samoa or "pacific islands" or polynesia or "samoan islands" or "navigator island" or "navigator islands" or "sao tome and principe" or "saudi arabia" or senegal or serbia or seychelles or "sierra leone" or slovakia or "slovak republic" or slovenia or melanesia or "solomon island" or "solomon islands" or "norfolk island" or "norfolk islands" or somalia or "south africa" or "south sudan" or "sri lanka" or ceylon or "saint kitts and nevis" or "st. kitts and nevis" or "saint lucia" or "st. lucia" or "saint vincent and the grenadines" or "saint vincent" or "st. vincent" or grenadines or sudan or suriname or surinam or "dutch guiana" or "netherlands guiana" or syria or "syrian arab republic" or tajikistan or tadjikistan or tadjikistan or tadjik or tanzania or tanganyika or thailand or siam or "timor leste" or "east timor" or togo or "togolese republic" or tonga or "trinidad and tobago" or trinidad or tobago or tunisia or turkey or "turkey (republic)" or turkmenistan or turkmen or uganda or ukraine or uruguay or uzbekistan or uzbek or

vanuatu or "new hebrides" or venezuela or vietnam or "viet nam" or "middle east" or "west bank" or gaza or palestine or yemen or yugoslavia or zambia or zimbabwe or "northern rhodesia" or "global south" or "africa south of the sahara" or "sub-saharan africa" or "subsaharan africa" or "africa, central" or "central africa" or "africa, northern" or "north africa" or "northern africa" or magreb or maghrib or sahara or "africa, southern" or "southern africa" or "africa, eastern" or "east africa" or "eastern africa" or "africa, western" or "west africa" or "western africa" or "west indies" or "indian ocean islands" or caribbean or "central america" or "latin america" or "south and central america" or "south america" or "asia, central" or "central asia" or "asia, northern" or "north asia" or "northern asia" or "asia, southeastern" or "southeastern asia" or "south eastern asia" or "southeast asia" or "south east asia" or "asia, western" or "western asia" or "europe, eastern" or "east europe" or "eastern europe" or "developing country" or "developing countries" or "developing nation*" or "developing population*" or "developing world" or "less developed countr*" or "less developed nation*" or "less developed population*" or "less developed world" or "lesser developed countr*" or "lesser developed nation*" or "lesser developed population*" or "lesser developed world" or "under developed countr*" or "under developed nation*" or "under developed population*" or "under developed world" or "underdeveloped countr*" or "underdeveloped nation*" or "underdeveloped population*" or "underdeveloped world" or "middle income countr*" or "middle income nation*" or "middle income population*" or "low income countr*" or "low income nation*" or "low income population*" or "lower income countr*" or "lower income nation*" or "lower income population*" or "underserved countr*" or "underserved nation*" or "underserved population*" or "underserved world" or "under served countr*" or "under served nation*" or "under served population*" or "under served world" or "deprived countr*" or "deprived nation*" or "deprived population*" or "deprived world" or "poor countr*" or "poor nation*" or "poor population*" or "poor world" or "poorer countr*" or "poorer nation*" or "poorer population*" or "poorer world" or "developing econom*" or "less developed econom*" or "lesser developed econom*" or "under developed econom*" or "underdeveloped econom*" or "middle income econom*" or "low income econom*" or "lower income econom*" or "low gdp" or "low gnp" or "low gross domestic" or "low gross national" or "lower gdp" or "lower gnp" or "lower gross domestic" or "lower gross national" or lmic or lmic* or "third world" or "lami countr*" or "transitional countr*" or "emerging econom*" or "emerging nation*").ti,ab,lo. (344400)

14 Emerging Economies/ or Developing Countries/ or South Asian Cultural Groups/ or exp Southeast Asian Cultural Groups/ or African Cultural Groups/ or Chinese Cultural Groups/ (20313)

15 or/13-14 (350911)

16 Literature Review/ or Systematic Review/ or Meta Analysis/ (27384)

17 (systematic review or literature review or meta-analy* or metaanaly* or meta analy*).ti. (40131)

18 or/16-17 (63489)

19 Experimental Design/ or Clinical Trials/ or Between Groups Design/ or Randomized Controlled Trials/ or Experimental Methods/ or Quasi Experimental Methods/ (32293)

20 (random* or experiment* or (match* adj2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV adj2 (estimation or approach)) or regression

discontinuity or time series or segment* regression or (non adj2 participant*) or ((control or comparison) adj2 (group* or condition* or area* or intervention)).ti,ab,hw. (739017)

21 or/19-20 (743044)

22 18 or 21 (789480)

23 15 and 22 (49234)

24 12 and 23 (2067)

25 limit 24 to yr="2000 -Current" (1943)

Econlit <1886 to May 07, 2020> (Ovid) - Searched 27th May 2020

1 (d130 or d180 or f140 or h430 or i380 or o130 or o180 or o220 or q1*).cc. (59675)

2 (((farm* field school* or (farm* adj3 (train* or (build adj3 capacity))) or demonstration plot* or ((agricultur* or rural) adj extension) or farm*) adj3 educat*) or (farm* adj3 (organi#ation* or group* or cooperative* or co-op* or club*)) or (("social protection" or microfinance or "micro finance" or microloan* or "micro loan*") adj4 (farm* or smallholder* or agricultur*))).ti,ab,hw. (1551)

3 ((food adj3 (system or produc*)) or (agricultur* adj3 produc*) or aquacultur* or fisher* or livestock* or ((kitchen or home*) adj3 (farm* or garden*)) or "nutrition-sensitive" or (improv* adj3 (seed* or variet* or crop*)) or (genetic* adj modif* adj (food* or organism*)) or GMO* or ((compost* or manure* or mulch* or fertili* or pesticid* or insecticid*) adj3 (appl* or spray* or spread* or "use" or usage)) or ((drought* or pest* or insect*) adj3 (toleran* or resist*)) or (rotat* adj3 crop*) or (land adj3 manage*) or "fixed distance planting" or (plant* adj3 row?) or ((farm* or crop or agricultur*) adj6 subsid*) or (price* adj6 purchas* adj6 guarantee*) or ((agricultur* or crop* or rain* or weather or index) adj6 insurance) or (irrigat* adj6 (project* or program* or access* or improv*)) or "water meter*" or (rain* adj3 (fed or feed*)) or (trench* adj3 hill*) or hilling or contour bund* or zai or "water break" or terrac* or ((farm* or agricultur*) adj3 (mechani#e* or mechani#ation*)) or intercrop* or (companion adj3 (plant* or variet* or species)) or "integrated soil fertility management" or ISFM or (pest adj3 manage*).ti,ab,hw. (27738)

4 (((grain* or crop* or agricultur* or aquacultur* or farm* or produce) adj6 (silo* or stor* or shed* or warehous*)) or ((agricultur* or farm*) adj3 (collect* or distribut*) adj3 (centre* or center* or point* or hub*)) or ((farm* or produce or food* or agricultur*) adj6 ("cold chain*" or ((refrigerat* or cold) adj3 (truck* or transport* or transit)))) or ((import? or importation or export*) adj6 (tariff* or quota* or ban* or restrict* or regulat*)) or "trade agreement*).ti,ab,hw. (9196)

5 (((food* or crop* or staple*) adj3 (fortif* or biofortif*)) or ((recycl* or compost* or biodegrad* or plastic*) adj3 (pack* or sache*)) or (post-harvest adj6 (clean* or winnow* or cann* or mill* or thresh* or hull*)) or ((food* or crop* or grain*) adj3 dry*).ti,ab,hw. (157)

6 ((food adj3 (loss* or wast*)) or ((food* or grocer* or soup) adj6 (donat* or pantr* or bank* or kitchen* or transfer*)) or (food* adj6 near* adj6 spoil*).ti,ab,hw. (526)

7 ("food environment*" or (zoning and (food* adj3 (security or access*))) or ((sugar* or SSB or "unhealthy food*") adj3 tax*) or nudg* or ((food* or eat* or feed* or meal* or diet*) adj6 (deci* or ((cultur* or social) adj3 (norm* or preferen*))) or "ration shop*" or "farmer* market*" or "food desert*" or ((food or grocer*) adj3 retail*

adj3 (tax* or subsid* or incentiv*) or (school* adj6 (meal* or feed* or food* or lunch*))).ti,ab,hw. (1803)

8 (((food* or consumer*) adj6 (subsid* or "price control*")) or (food* adj6 (cash or "social assistance" or "social safety net" or voucher* or welfare))).ti,ab,hw. (1669)

9 ((food* adj6 ((advertis* or label* or market*) adj3 (ban* or restrict* or regulat* or polic* or law* or legislat*))) or ((supermarket or ((food* or grocer* or convenience or corner) adj (store* or market*))) adj6 (design* or redesign* or re-design* or layout* or innovat*)) or (front adj3 pack* adj3 label*)).ti,ab,hw. (258)

10 ((food* adj3 (safe* or quality) adj3 (regulat* or restrict* or polic* or law* or legislat* or inspect*)) or (food* adj3 certif*)).ti,ab,hw. (328)

11 (cook* or ((meal* or food*) adj3 prepar*) or (wom#n adj6 (food* or eat* or feed* or meal* or diet*) adj6 (empower* or deci*)) or ((food* or eat* or feed* or breastfeed* or "breast feed*" or meal* or diet* or "F&V") adj6 (inform* or educat* or promot* or campaign* or media or initiative* or (peer adj (counsel* or support)) or (community adj3 (meet* or class* or engag* or participat*)) or "door-to-door"))).ti,ab,hw. (3078)

12 or/1-11 (87141)

13 (afghanistan or albania or algeria or "american samoa" or angola or "antigua and barbuda" or antigua or barbuda or argentina or armenia or armenian or aruba or azerbaijan or bahrain or bangladesh or barbados or belarus or byelarus or belorussia or byelorussian or belize or "british honduras" or benin or dahomey or bhutan or bolivia or "bosnia and herzegovina" or bosnia or herzegovina or botswana or bechuanaland or brazil or brasil or bulgaria or "burkina faso" or "burkina fasso" or "upper volta" or burundi or urundi or "cabo verde" or "cape verde" or cambodia or kampuhea or "khmer republic" or cameroon or cameron or cameroun or "central african republic" or "ubangi shari" or chad or chile or china or colombia or comoros or "comoro islands" or "iles comores" or mayotte or "democratic republic of the congo" or "democratic republic congo" or congo or zaire or "costa rica" or "cote d'ivoire" or "cote d'ivoire" or "cote divoire" or "cote d ivoire" or "ivory coast" or croatia or cuba or cyprus or "czech republic" or czechoslovakia or djibouti or "french somaliland" or dominica or "dominican republic" or ecuador or egypt or "united arab republic" or "el salvador" or "equatorial guinea" or "spanish guinea" or eritrea or estonia or eswatini or swaziland or ethiopia or fiji or gabon or "gabonese republic" or gambia or "georgia (republic)" or georgian or ghana or "gold coast" or gibraltar or greece or grenada or guam or guatemala or guinea or "guinea bissau" or guyana or "british guiana" or haiti or hispaniola or honduras or hungary or india or indonesia or timor or iran or iraq or "isle of man" or jamaica or jordan or kazakhstan or kazakh or kenya or "democratic people's republic of korea" or "republic of korea" or "north korea" or "south korea" or korea or kosovo or kyrgyzstan or kirghizia or kirgizstan or "kyrgyz republic" or kirghiz or laos or "lao pdr" or "lao people's democratic republic" or latvia or lebanon or "lebanese republic" or lesotho or basutoland or liberia or libya or "libyan arab jamahiriya" or lithuania or macau or macao or "macedonia (republic)" or macedonia or madagascar or "malagasy republic" or malawi or niasaland or malaysia or "malay federation" or "malaya federation" or maldives or "indian ocean islands" or "indian ocean" or mali or malta or micronesia or "federated states of micronesia" or kiribati or "marshall islands" or nauru or "northern mariana islands" or palau or tuvalu or mauritania or mauritius or mexico or moldova or moldovian or mongolia or montenegro or morocco or ifni or mozambique or "portuguese east africa" or myanmar or burma or namibia or nepal or "netherlands antilles" or nicaragua or niger or nigeria or oman or muscat or pakistan or panama or "papua new guinea" or "new guinea" or paraguay or peru or philippines or philippines or philippines or philippines or poland or "polish people's republic" or portugal or "portuguese republic" or "puerto rico" or romania or russia or "russian federation" or ussr or "soviet union" or "union of

soviet socialist republics" or rwanada or ruanda or samoa or "pacific islands" or polynesia or "samoan islands" or "navigator island" or "navigator islands" or "sao tome and principe" or "saudi arabia" or senegal or serbia or seychelles or "sierra leone" or slovakia or "slovak republic" or slovenia or melanesia or "solomon island" or "solomon islands" or "norfolk island" or "norfolk islands" or somalia or "south africa" or "south sudan" or "sri lanka" or ceylon or "saint kitts and nevis" or "st. kitts and nevis" or "saint lucia" or "st. lucia" or "saint vincent and the grenadines" or "saint vincent" or "st. vincent" or grenadines or sudan or suriname or surinam or "dutch guiana" or "netherlands guiana" or syria or "syrian arab republic" or tajikistan or tadjikistan or tadjikistan or tadjhikistan or tadjhik or tanzania or tanganyika or thailand or siam or "timor leste" or "east timor" or togo or "togolese republic" or tonga or "trinidad and tobago" or trinidad or tobago or tunisia or turkey or "turkey (republic)" or turkmenistan or turkmen or uganda or ukraine or uruguay or uzbekistan or uzbek or vanuatu or "new hebrides" or venezuela or vietnam or "viet nam" or "middle east" or "west bank" or gaza or palestine or yemen or yugoslavia or zambia or zimbabwe or "northern rhodesia" or "global south" or "africa south of the sahara" or "sub-saharan africa" or "subsaharan africa" or "africa, central" or "central africa" or "africa, northern" or "north africa" or "northern africa" or magreb or maghrib or sahara or "africa, southern" or "southern africa" or "africa, eastern" or "east africa" or "eastern africa" or "africa, western" or "west africa" or "western africa" or "west indies" or "indian ocean islands" or caribbean or "central america" or "latin america" or "south and central america" or "south america" or "asia, central" or "central asia" or "asia, northern" or "north asia" or "northern asia" or "asia, southeastern" or "southeastern asia" or "south eastern asia" or "southeast asia" or "south east asia" or "asia, western" or "western asia" or "europe, eastern" or "east europe" or "eastern europe" or "developing country" or "developing countries" or "developing nation*" or "developing population*" or "developing world" or "less developed countr*" or "less developed nation*" or "less developed population*" or "less developed world" or "lesser developed countr*" or "lesser developed nation*" or "lesser developed population*" or "lesser developed world" or "under developed countr*" or "under developed nation*" or "under developed population*" or "under developed world" or "underdeveloped countr*" or "underdeveloped nation*" or "underdeveloped population*" or "underdeveloped world" or "middle income countr*" or "middle income nation*" or "middle income population*" or "low income countr*" or "low income nation*" or "low income population*" or "lower income countr*" or "lower income nation*" or "lower income population*" or "underserved countr*" or "underserved nation*" or "underserved population*" or "underserved world" or "under served countr*" or "under served nation*" or "under served population*" or "under served world" or "deprived countr*" or "deprived nation*" or "deprived population*" or "deprived world" or "poor countr*" or "poor nation*" or "poor population*" or "poor world" or "poorer countr*" or "poorer nation*" or "poorer population*" or "poorer world" or "developing econom*" or "less developed econom*" or "lesser developed econom*" or "under developed econom*" or "underdeveloped econom*" or "middle income econom*" or "low income econom*" or "lower income econom*" or "low gdp" or "low gnp" or "low gross domestic" or "low gross national" or "lower gdp" or "lower gnp" or "lower gross domestic" or "lower gross national" or lmic or lmicr or "third world" or "lami countr*" or "transitional countr*" or "emerging econom*" or "emerging nation*").ti,ab,hw. (275640)

14 (systematic review or literature review or meta-analy* or metaanaly* or meta analy*).ti. (1792)

15 (random* or experiment* or (match* adj2 (propensity or coarsened or covariate)) or "propensity score" or ("difference in difference*" or "difference-in-

difference*" or "differences in difference*" or "differences-in-difference*" or "double difference*") or ("quasi-experimental" or "quasi experimental" or "quasi-experiment" or "quasi experiment") or ((estimator or counterfactual) and evaluation*) or "instrumental variable*" or (IV adj2 (estimation or approach)) or regression discontinuity or time series or segment* regression or (non adj2 participant*) or ((control or comparison) adj2 (group* or condition* or area* or intervention)).ti,ab,hw. (115198)
 16 14 or 15 (116813)
 17 12 and 13 and 16 (2572)
 18 limit 17 to yr="2000 -Current" (2465)

JEL Codes:

D130 Household Production and Intrahousehold Allocation
 D180 Consumer Protection
 F140 Empirical Studies of Trade
 H430 Project Evaluation; Social Discount Rate
 I380 Welfare, Well-Being, and Poverty: Government Programs; Provision and Effects of Welfare Programs
 O130 Economic Development: Agriculture; Natural Resources; Energy; Environment; Other Primary Products
 O180 Economic Development: Urban, Rural, Regional, and Transportation Analysis; Housing; Infrastructure
 O220 Project Analysis
 Q1 Agriculture
 Q10 General
 Q11 Aggregate Supply and Demand Analysis; Prices
 Q12 Micro Analysis of Farm Firms, Farm Households, and Farm Input Markets
 Q13 Agricultural Markets and Marketing; Cooperatives; Agribusiness
 Q14 Agricultural Finance
 Q15 Land Ownership and Tenure; Land Reform; Land Use; Irrigation; Agriculture and Environment
 Q16 R&D; Agricultural Technology; Biofuels; Agricultural Extension Services
 Q17 Agriculture in International Trade
 Q18 Agricultural Policy; Food Policy
 Q19 Other

3ie Development Evidence Portal – Searched 6th June 2020

Title:((cook* OR ((meal* OR food*) AND prepar*) OR (wom*n AND (food* OR eat* OR feed* OR meal* OR diet*) AND (empower* OR deci*)) OR ((food* OR eat* OR feed* OR breastfeed* OR "breast feed*" OR meal* OR diet* OR "F&V") AND (inform* OR educat* OR promot* OR campaign* OR media OR initiative* OR (peer AND (counsel* OR support)) OR (community AND (meet* OR class* OR engag* OR participat*)) OR "door-to-door")))) OR Abstract:((cook* OR ((meal* OR food*) AND prepar*) OR (wom*n AND (food* OR eat* OR feed* OR meal* OR diet*) AND (empower* OR deci*)) OR ((food* OR eat* OR feed* OR breastfeed* OR "breast feed*" OR meal* OR diet* OR "F&V") AND (inform* OR educat* OR promot* OR campaign* OR media OR initiative* OR (peer AND (counsel* OR support)) OR (community AND (meet* OR class* OR engag* OR participat*)) OR "door-to-door")))) — **340 hits**

Title:(((Food AND (system OR produc*)) OR (agricultur* AND produc*) OR aquacultur* OR fisher* OR livestock* OR ((kitchen OR home*) AND (farm* OR garden*)) OR "nutrition-sensitive" OR (improv* AND (seed* OR variet* OR crop*)) OR (genetic* AND modif* AND (food* OR organism*)) OR GMO* OR ((compost* OR manure* OR mulch* OR fertili* OR pesticid* OR insecticid*) AND (appl* OR spray* OR spread* OR use OR usage)) OR ((drought* OR pest* OR insect*) AND (toleran* OR resist*)) OR (rotat* AND crop*) OR (land AND manage*) OR "fixed distance planting" OR (plant* AND (row OR rows*)) OR ((farm* OR crop OR agricultur*) AND subsid*) OR (price* AND purchas* AND guarantee*) OR ((agricultur* OR crop* OR rain* OR weather OR index) AND insurance) OR (irrigat* AND (project* OR program* OR access* OR improv*)) OR "water meter*" OR (rain* AND (fed OR feed*)) OR (trench* AND hill*) OR hilling OR "contour bund*" OR zai OR "water break" OR terrac* OR ((farm* OR agricultur*) AND (mechani*e* OR mechani*ation*)) OR intercrop* OR (companion AND (plant* OR variet* OR species)) OR "integrated soil fertility management" OR ISFM OR (pest AND manag*))) OR Abstract:(((Food AND (system OR produc*)) OR (agricultur* AND produc*) OR aquacultur* OR fisher* OR livestock* OR ((kitchen OR home*) AND (farm* OR garden*)) OR "nutrition-sensitive" OR (improv* AND (seed* OR variet* OR crop*)) OR (genetic* AND modif* AND (food* OR organism*)) OR GMO* OR ((compost* OR manure* OR mulch* OR fertili* OR pesticid* OR insecticid*) AND (appl* OR spray* OR spread* OR use OR usage)) OR ((drought* OR pest* OR insect*) AND (toleran* OR resist*)) OR (rotat* AND crop*) OR (land AND manage*) OR "fixed distance planting" OR (plant* AND (row OR rows*)) OR ((farm* OR crop OR agricultur*) AND subsid*) OR (price* AND purchas* AND guarantee*) OR ((agricultur* OR crop* OR rain* OR weather OR index) AND insurance) OR (irrigat* AND (project* OR program* OR access* OR improv*)) OR "water meter*" OR (rain* AND (fed OR feed*)) OR (trench* AND hill*) OR hilling OR "contour bund*" OR zai OR "water break" OR terrac* OR ((farm* OR agricultur*) AND (mechani*e* OR mechani*ation*)) OR intercrop* OR (companion AND (plant* OR variet* OR species)) OR "integrated soil fertility management" OR ISFM OR (pest AND manag*))) — **430 hits**

Title:((((grain* OR crop* OR agricultur* OR farm* OR produce) AND (silo* OR stor* OR shed* OR warehous*)) OR ((agricultur* OR farm*) AND (collection OR distribution) AND (centre* OR center* OR point* OR hub*)) OR ((farm* OR produce OR food* OR agricultur*) AND ("cold chain*" OR ((refrigerat* OR cold) AND (truck* OR transport* OR transit)))) OR ((import OR imports OR importation OR export*) AND (tariff* OR quota* OR ban* OR restrict* OR regulat*)) OR "trade agreement*")) OR Abstract:((((grain* OR crop* OR agricultur* OR farm* OR produce) AND (silo* OR stor* OR shed* OR warehous*)) OR ((agricultur* OR farm*) AND (collection OR distribution) AND (centre* OR center* OR point* OR hub*)) OR ((farm* OR produce OR food* OR agricultur*) AND ("cold chain*" OR ((refrigerat* OR cold) AND (truck* OR transport* OR transit)))) OR ((import OR imports OR importation OR export*) AND (tariff* OR quota* OR ban* OR restrict* OR regulat*)) OR "trade agreement*")) — **33 hits**

Title:((((food* OR crop* OR staple*) AND (fortif* OR biofortif*)) OR ((recycl* OR compost* OR biodegrad* OR plastic*) AND (pack* OR sache*)) OR (post-harvest AND (clean* OR winnow* OR cann* OR mill* OR thresh* OR hull*)) OR ((food* OR crop* OR grain*) AND dry*))) OR Abstract:((((food* OR crop* OR staple*) AND (fortif* OR biofortif*)) OR ((recycl* OR compost* OR biodegrad* OR plastic*) AND (pack* OR sache*)) OR (post-harvest AND (clean* OR winnow* OR cann* OR mill* OR thresh* OR hull*)) OR ((food* OR crop* OR grain*) AND dry*))) — **57 hits**

Title:(((food AND (loss* OR wast*)) OR ((food* OR grocer* OR soup) AND (donat* OR pantr* OR bank* OR kitchen* OR transfer*)) OR (food* AND near* AND spoil*))) OR Abstract:(((food AND (loss* OR wast*)) OR ((food* OR grocer* OR soup) AND (donat* OR pantr* OR bank* OR kitchen* OR transfer*)) OR (food* AND near* AND spoil*))) — **101 hits**

Title:(("food environment*" OR (zoning AND (food* AND (security OR access*))) OR ((sugar* OR SSB OR "unhealthy food*") AND tax*) OR nudg* OR ((food* OR eat* OR feed* OR meal* OR diet*) AND (deci* OR ((cultur* OR social) AND (norm* OR preferen*)))) OR "ration shop*" OR "farmer* market*" OR "food desert*" OR ((food OR grocer*) AND retail* AND (tax* OR subsid* OR incentiv*)) OR (school* AND (meal* OR feed* OR food* OR lunch*)))) OR Abstract:(("food environment*" OR (zoning AND (food* AND (security OR access*))) OR ((sugar* OR SSB OR "unhealthy food*") AND tax*) OR nudg* OR ((food* OR eat* OR feed* OR meal* OR diet*) AND (deci* OR ((cultur* OR social) AND (norm* OR preferen*)))) OR "ration shop*" OR "farmer* market*" OR "food desert*" OR ((food OR grocer*) AND retail* AND (tax* OR subsid* OR incentiv*)) OR (school* AND (meal* OR feed* OR food* OR lunch*)))) — **123 hits**

Title:((((food* OR consumer*) AND (subsid* OR "price control*")) OR (food* AND (cash OR "social assistance" OR "social safety net" OR voucher* OR welfare)))) OR Abstract:((((food* OR consumer*) AND (subsid* OR "price control*")) OR (food* AND (cash OR "social assistance" OR "social safety net" OR voucher* OR welfare)))) — **111 hits**

Title:(((food* AND ((advertis* OR label* OR market*) AND (ban* OR restrict* OR regulat* OR polic* OR law* OR legislat*))) OR ((supermarket OR ((food* OR grocer* OR convenience OR corner) AND (store* OR market*))) AND (design* OR redesign* OR re-design* OR layout* OR innovat*)) OR (front AND pack* AND label*))) OR Abstract:(((food* AND ((advertis* OR label* OR market*) AND (ban* OR restrict* OR regulat* OR polic* OR law* OR legislat*))) OR ((supermarket OR ((food* OR grocer* OR convenience OR corner) AND (store* OR market*))) AND (design* OR redesign* OR re-design* OR layout* OR innovat*)) OR (front AND pack* AND label*))) — **27 hits**

Title:((((food* AND (safe* OR quality)) AND (regulat* OR restrict* OR polic* OR law* OR legislat* OR inspect*)) OR (food* AND certif*))) OR Abstract:((((food* AND (safe* OR quality)) AND (regulat* OR restrict* OR polic* OR law* OR legislat* OR inspect*)) OR (food* AND certif*))) — **14 hits**

Title:((cook* OR ((meal* OR food*) AND prepar*) OR (wom*n AND (food* OR eat* OR feed* OR meal* OR diet*) AND (empower* OR deci*)) OR ((food* OR eat* OR feed* OR breastfeed* OR "breast feed*" OR meal* OR diet* OR "F&V") AND (inform* OR educat* OR promot* OR campaign* OR media OR initiative* OR (peer AND (counsel* OR support))) OR (community AND (meet* OR class* OR engag* OR participat*)) OR "door-to-door"))) OR Abstract:((cook* OR ((meal* OR food*) AND prepar*) OR (wom*n AND (food* OR eat* OR feed* OR meal* OR diet*) AND (empower* OR deci*)) OR ((food* OR eat* OR feed* OR breastfeed* OR "breast feed*" OR meal* OR diet* OR "F&V") AND (inform* OR educat* OR promot* OR campaign* OR media OR initiative* OR (peer AND (counsel* OR support))) OR

(community AND (meet* OR class* OR engag* OR participat*)) OR "door-to-door"))
) — **340 hits**

Total raw results: 1397

Total after de-duplication: 875

C2. Search strategy for grey literature sources

Database	Search strategy and terms	Documents identified/screened before import	Documents imported for full screening
AgEcon search	Advanced search "evaluation" OR "systematic review"	496	37
Innovations for Poverty Action (IPA)	Added topic filters: food security, nutrition and maternal & child health.	58	15
J-PAL	Nutrition agriculture food security	311	72
Global Development Network	Food OR agriculture	70	1
World Bank Development Impact Evaluation (DIME) and Impact evaluation Policy Papers	(food OR agriculture) AND ("impact evaluation" OR "systematic review")	256	31
Inter-American Development Bank	1. Topic filter: nutrition. Publication filter: discussion papers, working papers and co-publications.	70	5

	2. Topic filter: agriculture and food security. Publication type filter: discussion paper, annual reports, magazines, journals and newspapers and working papers.		
Center for Global Development	1. Agriculture 2. Nutrition 3. Food	49	3
Center for Effective Global Action (CEGA)	Sector filter: agriculture	64	7
DFID Research for Development (R4D)	filter 12 document types: case study, conference paper, discussion paper, journal article, research paper, technical report, protocol, working paper, thematic summary, evaluation report, journal issue, systematic review. Theme filters: food and nutrition	885	9
USAID	Search nutrition, Sector filter: Agriculture and food security, document type filter: evaluation	826	27
IFPRI	1. "impact evaluation" 2. "Systematic review"	272	19
CGIAR	Food	329	32
Food and Agriculture Organization of the United Nations (FAO)	("Impact evaluation" OR "systematic review") AND food	1124	60
HLPE	Checked references of reports		64
World Food Programme (WFP)	Publication type filter: evaluations	189	40
Action Against Hunger	1. Topic filter: Impact & innovation 2. Topic filter: Nutrition & care practices 3. Topic filter: food security & livelihoods	55	0
UNICEF	1. Food 2. Agriculture 3. Evaluation	83	7
United Nations Evaluation Group	1. Food 2. Agriculture	210	64
Asian Development Bank	Filter type: evaluation document and search term: nutrition OR food OR agriculture	335	5
World Agroforestry Centre (ICRAF)	1. food evaluation site:worldagroforestry.org/publication (searched in google)	398	46
International Livestock Research Institute (ILRI)	1. Evaluation 2. "Systematic review"	190	27
Nutrition International	Select a region: select all and then untick Japan and US. Select a type of publication: evidence briefs, reports and best practice,	87	18

	research documents		
Google scholar	(food OR agriculture) AND (evaluation OR "systematic review"). Uploaded the first 1000 search results to EPPI and screened them there.	1000	
ENN-Network	1. Evaluation 2. "systematic review"	457	11
IMMANA grantee database	Hand searched	15	1
Grey Literature Report	1. Full subject filter: developing countries. Search nutrition 2. Full subject filter: developing countries. Search agriculture 3. Full subject filter: developing countries. Search: food system 4. Full subject filter: developing countries. Search: food security	66	0
Social Science Research Network (SSRN)	1. searched food system and then within the search searched nutrition 2. searched food system and then within the search searched agriculture	485	17
Eldis	Food AND evaluation	816	97
Registry of International Development Impact Evaluation (RIDIE)	1. Food 2. Filter study category- Agriculture and rural development	62	44
SPRING	1. Publication type filter: Journal articles 2. Publication type filter: Reports	112	7
FANTA	Publication type(s) filter: assessments, research results, journal articles or periodicals, reports	214	17

Appendix D: Example boundary decisions taken during screening

This section provides an illustration of decisions made during the screening process with respect to boundary cases, i.e. cases where the eligibility criteria provided in the protocol did not always enable the application of a clear screening decision. The core team meet to discuss these issues on a case-by-case basis to produce and disseminate guidance to the screening team:

- If the outcome were health problems that are not the direct cause of poor nutrition the studies were excluded. Health problems that were included were the following:
 - Iron – anaemia, haemoglobin, haematocrit
 - Iodine – goitre
 - Vitamin A – night blindness, xerophthalmia, retinol or carotenoids; not retinol binding protein)
 - Vitamin D – rickets
 - Vitamin C – scurvy
 - Folate – spina bifida or neural tube defects
 - Calcium – osteoporosis or osteopenia
- We excluded clinical studies unless there was a clear link to the food system as we have defined it. As such, we included studies that evaluate interventions that seek to introduce nutrition-related changes to prevent worsening health conditions for a population in general, and we excluded studies that seek to treat, or prevent the harmful consequences of, specific medical conditions.
- Agricultural studies that did not mention an attempt to modify farmer practices in some way, were excluded. Studies were also excluded if they were ambiguous on whether a target population was engaged, assuming that if this engagement was a key part of the study it would have been mentioned.
- Conditional cash transfers were included providing they were related to the food system in some way. For example, if the condition related to food or if parts of the cash transfer was meant to be spent on food. Unconditional cash transfers were all excluded.
- Cash crops, interventions concerning crops that are not produced for food for humans or animals, were considered outside the food system and therefore excluded.
- Interventions targeting drivers of the food system without an explicit food system focus were excluded as they do not actually function within the food system. For example, interventions to support conflict resolution in areas experiencing active conflict were not included despite the fact that these interventions would likely support the functioning of the food system.
- Interventions that seek to enhance the performance of a specific niche populations, such as athletes, the military, astronauts or actors/models were excluded. Interventions that provide nutrition intravenously (i.e. parenteral nutrition) were excluded on LMIC.
- We excluded studies where specifically migrants form the population of interest – for example, migrants from high-income countries based in LMICs, or vice versa.

Appendix E: Data extraction codebook

We extracted data from included studies in line with Table C1 below.

Table C1: Summary of descriptive codebook

Code	Sub-code	Description
study_id		EPPI ID
coder_name		Coder's name
line_id		Please leave this cell blank
database_source		Select a database source from the list. This information can be found at the bottom of the page for each record on EPPI, just above the space where PDFs are attached. E.g., if you see "Source: Academic Search Complete, Agris, Repec, WB e-lib, Oxfam Policy (Ebsco Discovery)...", code this as "Ebsco Discovery".
title_name		Use only the English version of the publication's main title. If paper is not written in English and has the title translated, use the translated version of the title. If the publication does not provide an English version, include the title in its original language. Please enter title in sentence case. Ensure there are no line breaks in the cell.
foreign_title		When publication is not written in English, code the original title using original accents and special characters. Example: Intervenção educacional em equipes do Programa de Saúde da Família para promoção da amamentação If not applicable, code "not applicable"
language		Select full text language that applies: English, French, Spanish or Portuguese

Code	Sub-code	Description
author information	author_name	<p>Enter all authors one by one. Each cell should contain only one author.</p> <p>The format is <last name>, <first name>, <second name or initial (if any)> Examples: Sabet, Shayda Sabet, Shayda M. Sabet, Shaya Mae</p> <p>Always place a dot after a first or middle initial.</p> <p>When a publication only provides first initials and last name, perform a cursory online search using the name and paper title to find the authors' full name. If search is unsuccessful, author/s will be coded following the format: <last name>, <first initial>.<second initial (if any)>. Examples: Miranda, J. Miranda, J.M.</p>
	author_ranking	Enter a number indicating where the author appears in the list of authors (i.e., first author will be "1", second author will be "2", etc.)
	author_affiliation_institution	Code the institution with which the author is affiliated according to what is noted in the article. Code the full name of the institution and its abbreviation (if relevant) in brackets. For example: "International Initiative for Impact Evaluation (3ie)" If no institutional information is included in the paper, code as "unidentified". Do not spend time searching for this information.
	author_affiliation_institution_department	Code the faculty, department, lab, etc. within the affiliated institution. For example, "Faculty of Economics" If it cannot be found in the paper, leave blank.
	author_affiliation_country	If specified or obvious, select country in which author's institution is located. If the institution's headquarters are in one country but the organization has affiliates or country offices all over the world (such as the World Bank or JPAL), and the affiliation mentioned does not specify a country office, then select the HQ country. For example, if the affiliated mentioned is simply "JPAL" select United States, if it says "JPAL Africa", then select South Africa. You may need to do some searching to identify this. If the author has more than one affiliation, repeat the author's name across multiple rows to account for all affiliations.
publication information	journal_name	Choose the name of journal from the dropdown list. If it cannot be found, select other.

Code	Sub-code	Description
	other_journal_name	<p>If you chose other above, follow the below instructions, and otherwise enter not applicable</p> <p>Use full journal name. Do not abbreviate name. Do not include "The" at the beginning. Example: Journal of Development Effectiveness</p> <p>If publication is a working paper, write the series name. If publication is a report, write the publishing institution Example: World Bank Policy Research Working Paper</p> <p>For conference papers, the journal name can be listed as "Proceedings of the <conference name>" Example: Proceedings of the 30th International Conference of Agricultural Economists</p>
	journal_volume	Use Arabic numerals (do not use Roman numerals). For working papers, record the series number. If no information is specified, leave blank.
	journal_issue	Add journal issue. If no information is specified, leave blank.
	pages	For example: 321-340 If no page numbers given in reference, leave blank. If the paper is not from a journal (e.g., a working paper), leave blank, even if the pages of the PDF are numbered 1-n.
	year_of_publication	Select the year when the print version of the study was published. The format is YYYY. If only publication online use this. If study does not have the year information select 9999.
	publisher_location	Type in the location of the publisher in the following format: City, Country. This is mainly for reports published by organisations. For journal articles, you can leave this blank unless the information is easily found in the PDF
	doi	Code the study's DOI. You may have to find this online by searching for the article. If no information is found, code as "no DOI". Example: 10.1007/s11127-017-0452-x
	abstract	Copy and paste study's abstract. If there's no abstract code, please copy and paste the first paragraph of the article. If a study is missing an abstract but provides a long executive summary, code as "no abstract." Ensure there are no line breaks.

Code	Sub-code	Description
	open_access	<p>If the study's full-text content is available free from the publisher, code as "Yes". If study has paywalls code as "No".</p> <p>If the paper is not available free from the publisher, but there is an unpublished version available (e.g., a draft/preprint on the author's website), code this as "No".</p> <p>If you discover that there is more than one published version (e.g., a journal article and a working paper), continue coding whichever version is more complete, and flag this to your supervisor.</p>
	3ie_funded	Code as "Yes" if 3ie is one of the research funders. If not, then code "No".
	publication_type	<p>Select from list:</p> <ul style="list-style-type: none"> • Journal article • Published working paper (these include discussion papers and technical reports/papers, if they are part of a series) • Published report • 3ie Series Report • 3ie Grantee Final Report • 3ie-funded ongoing study • Book or book chapter
	url	If study is a journal article, enter the URL of the landing page from the journal publisher's website. If study is a published working paper or published report, enter URL of the document's landing page from the publishing website. If study is a published working paper or published report and there is not a landing page, provide url of the full-text PDF.
sector information	sector_name	<p>Select ONE sector that applies according to the intervention evaluation:</p> <ul style="list-style-type: none"> • Agriculture, fishing & forestry • Education • Energy & extractives • Financial sector • Health • Social protection • Industry, trade & services • Information & communications technologies • Public administration • Transportation • Water, sanitation & waste management

Code	Sub-code	Description
		Sector should apply to the intervention, not the outcome. If the study looks at the effects of a cash transfer programme on health outcomes, the sector is Social Protection, not Health
	sub-sector_name	Select all sub-sectors that apply according to the sector indicated in previous column. For two or more sub-sectors in one sector, enter in a new row. (Note: the dropdown menu will show only subsectors for the sector you selected in the previous column. You must select a sector in the previous column to access the dropdown for this field.) See World Bank taxonomy for definitions saved in consultant folder
	first_theme	Select all themes that apply See World Bank taxonomy for definitions saved in consultant folder If not applicable, select "not applicable"
	sub-theme_1	Select all sub-themes that apply according to the theme indicated in previous column. For two or more sub-themes for one theme, enter in a new row. (Note: the dropdown menu will show only subsectors for the sector you selected in the previous column. You must select a sector in the previous column to access the dropdown for this field.) See attached taxonomy for definitions If not applicable, select "not applicable"
	second_theme	Select all themes that apply See attached taxonomy for definitions If not applicable, select "not applicable"
	sub-theme_2	Select all sub-themes that apply according to the theme indicated in previous column. For two or more sub-themes for one theme, enter in a new row. (Note: the dropdown menu will show only subsectors for the sector you selected in the previous column. You must select a sector in the previous column to access the dropdown for this field.) See attached taxonomy for definitions If not applicable, select "not applicable"
	third_theme	Select all themes that apply See attached taxonomy for definitions
	sub-theme_3	Select all sub-themes that apply according to the theme indicated in previous column. For two or more sub-themes for one theme, enter in a new row. (Note: the dropdown menu will show only subsectors for the sector you selected in the previous column. You must select a sector in the previous column to access the dropdown for this field.) See attached taxonomy for definitions If not applicable, select "not applicable"

Code	Sub-code	Description
	other_topics	Select one or more other topics that apply. <ul style="list-style-type: none"> • Agricultural technology • Business training • Cash transfers • Community driven development • Cost-benefit/effectiveness analysis • Farmer field schools • Humanitarian aid • Microfinance • Payment for ecosystem services • Performance-/results-based financing • Rotating savings and credit associations If none applicable, select "not applicable" See agency and other topics sheet for definitions
	keywords	Enter all author provided keywords, one per row. If the author does not provide any or if there are important keywords you think are missing, please add them (maximum 6 in total)
geographic information	continent_name	Select the continent/region in which the study was conducted: <ul style="list-style-type: none"> • East Asia and Pacific • Europe and Central Asia • Latin America and Caribbean • Middle East and North Africa • North America • South Asia • Sub-Saharan Africa
	country_name	Select the countries in which the study was conducted (drop down menu). (Note: the dropdown menu will show only countries for the continent you selected in the previous column. You must select a continent in the previous column to access the dropdown for this field.) If multiple countries from the same continent, enter the continent again in the previous column, and add additional countries in multiple rows. If multiple countries from multiple continents, repeat this for each continent/country.
	country_income_level	County income status automatically defined using World Bank Atlas Method.
	FCV_status	Fragility status defined using World Bank list.
	region_name	Enter all the regions in which the study took place, if provided in the study. This includes both intervention and control groups. Here, "region" means an administrative

Code	Sub-code	Description
		<p>division of a country that is larger than a state or province. Some countries have such divisions and call them “regions”.</p> <p>Please only use the information available in the papers only. Do not complete desk research to fill the gaps.</p>
	state/province_name	<p>Enter all the states/provinces in which the study took place, if provided in the study. This includes both intervention and control groups. If the state/province is not identified, but you can infer it from other geographic information provided and a little bit of internet searching, enter it here.</p> <p>Please only use the information available in the papers only. Do not complete desk research to fill the gaps.</p> <p>If there are multiple states/provinces from the same region, be sure to repeat the region name from the previous columns on each row also repeat not specified if the region is not specified, so that in each cell in which a state/province appears, it is paired with the /region on the same row.</p>
	district_name	<p>Enter all the districts in which the study took place, if provided in the study. This includes both intervention and control groups. If the district is not identified, but you can infer it from other geographic information provided and a little bit of internet searching, enter it here.</p> <p>Please only use the information available in the papers only. Do not complete desk research to fill the gaps.</p> <p>If there are multiple districts from the same state/province, be sure to repeat the state/province name from the previous column on each row also do this if the name is not specified, so that in each cell in which a district appears, it is paired with the state/province on the same row.</p>
	city/town_name	<p>Enter all the cities, towns or villages in which the study took place, if provided in the study. This includes both intervention and control groups. Please only use the information available in the papers only. Do not complete desk research to fill the gaps.</p> <p>If there are multiple cities/towns from the same district, be sure to repeat the district name from the previous column on each row also do this if the name is not specified, so that in each cell in which a city/town appears, it is paired with the district on the same row.</p>

Code	Sub-code	Description
	location_name	<p>Enter any locations in which the study took place. This includes both intervention and control groups.</p> <p>Locations can be broad geographic areas that extend across regions or villages. Locations can also be specific target locations that go beyond the city, town or village level, such as municipality, parish and neighbourhood, among others. Please only use the information available in the papers only. Do not complete desk research to fill the gaps.</p> <p>If there are multiple locations, make sure they are paired with the relevant administrative divisions in the previous columns (this may not be possible if the location cuts across multiple administrative divisions).</p>
methodological information	evaluation_design	<p>Select one of two options defined as:</p> <p>1. Experimental: a) RCT defined as prospective randomised assignment, where randomisation is implemented by researchers (or by decision makers in the context of an evaluation study)</p> <p>2. Quasi-experimental: a) Quasi-random assignment: i) regression discontinuity design (sharp designs) or ii) natural experiment in which exposure to treatment is random b) Non-random assignment: i) Studies that control for unobservables (DID, FE, IV, Fuzzy RDD, ITS) or ii) studies that control for observables only (e.g. statistical matching, synth control, regression adjustment)</p>
	evaluation_method	<p>If Experimental then select: Randomised controlled trials</p> <p>If Quasi-experimental then select: Sharp RDD DID FE estimation IV estimation Fuzzy RDD Statistical matching (includes PSM) Synthetic control group</p>
	mixed_method	Select YES if study includes quantitative and qualitative analyses, otherwise select NO.
	additional_methods1	Select additional method if any. If none, use N/A
	additional_methods2	Select additional method if any. If none, use N/A
	unit_of_observation	<p>Enter all the levels of observation of the variables used for the analysis:</p> <ul style="list-style-type: none"> • Country

Code	Sub-code	Description
		<ul style="list-style-type: none"> • Community • Village/city • Cohort (includes schools or clinics) • Household • Individual • Non-human If more than one, include in separate rows.
	study_status	Is the study ongoing or complete? Ongoing, complete
program, funding & implementation	project_programme_name	Code the name of the project/program being evaluated (if any)
	implementation_agency_category	Select one of the following: <ul style="list-style-type: none"> • Government agency • International Aid Agency • International Financial Institution • Non-Profit Organization • For-Profit Firm • Academic Institution • Charitable Foundation or Private Foundation Not specified See agency and other topics sheet for definitions
	implementation_agency_name	Input the name of the agenc(ies) implementing the program
	program_funding_agency_category	What category of funding agency funded the program? Note: only code if reported in the study, no need to do additional research to find. Select one of the following: <ul style="list-style-type: none"> • Government agency • International Aid Agency • International Financial Institution • Non-Profit Organization • For-Profit Firm • Academic Institution • Charitable Foundation or Private Foundation • Not specified See agency and other topics sheet for definitions
	program_funding_agency_name	Input the name of the agenc(ies) funding the research (note: this is not the same as organizations that fund the research of the evaluation)
	researching_funding_agency_category	What category of funding agency funded the research? Note: only code if reported in the study, no need to do additional research to find. Select one of the following:

Code	Sub-code	Description
		<ul style="list-style-type: none"> • Government agency • International Aid Agency • International Financial Institution • Non-Profit Organization • For-Profit Firm • Academic Institution • Charitable Foundation or Private Foundation • Not specified <p>See agency and other topics sheet for definitions</p>
	researching_funding_agency_name	Input the name of the agenc(ies) funding the research (note: this is not the same as organizations that fund the program). If the paper has an "Acknowledgements" section, this information can usually be found there.
Population targeting	age	<p>If you identify another code option please email the core team to discuss this. Select the intervention age group (in years) from one of the following:</p> <p><2 2=<x<5 5=<x<10 10=<x<20 (adolescent 10-19 - WHO definition) 20=<x<60 >60 (elderly)</p> <p>Not specified, i.e. the age of the human target population is not reported specifically. Not applicable, i.e. the target population is not human.</p>
	sex	<p>Select on option from list:</p> <p>Male Female Both Not specified, i.e. the sex of the human target population is not specified. Not applicable, i.e. the target population is not human.</p>

Code	Sub-code	Description
	reproductive_state	<p>Code the study if the if the population targeted relates to one of the following reproductive states of women. Select all that apply:</p> <p>Pregnant - The target population is specifically stated to be women that have a child or young developing in their uterus.</p> <p>Postpartum - The target population is specifically stated to be in the period just after the delivery of a baby. It begins immediately after the birth, and lasts for a culturally variable length: typically for one month or 30 days, up to 40 days, two months or 100 days.</p> <p>Lactating - Where the target population is specifically stated is "lactating women".</p> <p>Pre-menarchal girls - The target population is specifically stated to be of, relating to, or being in the period of life of a female before the first menstrual period occurs.</p> <p>Post-menarchal girls - The target population is specifically stated to be of, relating to, or being in the period of life of a female after the first menstrual period occurs.</p> <p>Menopausal women - The target population is specifically stated to be women going through menopause, which is when a woman stops having periods and is no longer able to get pregnant naturally.</p> <p>Post-menopausal women - The target population is specifically stated to be women who have been through menopause, which is when a woman stops having periods and is no longer able to get pregnant naturally.</p> <p>not applicable, i.e. the target population of the study is not pregnant women.</p>
	rural_urban	<p>Is the target population studied based in which of the following areas:</p> <p>Rural: The authors specifically state the target population was based in a rural area.</p> <p>Peri-urban: The authors specifically state the target population was based in a peri-rural area, i.e. an area that is not fully characterised as either rural or urban, e.g. outskirts of cities.</p> <p>Urban: The authors specifically state the target population was based in an urban area.</p> <p>Rural and urban: The authors specifically state the target population was based in both rural and urban areas.</p> <p>Not specified: The location of the target population is not specified</p> <p>If it does not mention rural or urban, but says it takes place in a city then select urban and if it says the countryside then select rural. If the article does not refer to one of these categories but states the specific location of the target population, look this location up and make an assessment, listing the source you used.</p>

Code	Sub-code	Description
		If the article does not make reference to one of these categories but states the specific location of the target population, look this location up and make an assessment, listing the source you used.
	scale	Select the scale of the intervention from list: Local - the study takes place within one region. Subnational - The study takes place across one or more regions. National - the study is stated to be evaluating a national programme by the authors Transnational - the study takes place across multiple countries.
	study_setting	Select from list where the target population was primarily located: Household - the intervention was primarily located within the household. Hospital - the intervention was primarily located in the hospital. School - the intervention was primarily located at a school. Farm - the intervention was primarily located at a farm. Business -the intervention was primarily located at the intervention groups workplace. Community - the intervention was primarily located in the community at a larger scale than the other alternatives.
Cost	cost_data	Does the study report any cost data? Yes; No
	cost_data_2	If you answered "yes" to the cost data code select any of the following that apply: -The programme budget is stated in some form. e.g. presented in total or per capita. -Programme budget is disaggregated by inputs and activities, e.g. cost data is broken down by specific line items -Programme budget is disaggregated over time, eg. years -Some analysis of costs is undertaken, e.g. analysis of changes over time or determinants of budget changes -Some comparison between costs and additional benefits is made using a cited method, e.g. cost-benefit analysis, cost effectiveness analysis, economic evaluation. -Other (specify) Please see the consultant folder here (https://bit.ly/3eSyVdw) for examples of studies that include cost analysis.
	cost_other	Report the exact approach taken to report and/or analyse cost data using verbatim from the study, making sure to report the page number where this is stated.
Framework - Intervention	multicomponent_intervention	Code this after you code the interventions and outcomes: 1. Is there more than one intervention subcode applied to this intervention? If yes, go to question 2

Code	Sub-code	Description
		<p>If no, code as No</p> <p>2. Is each intervention subcode evaluated independently, i.e. separate effect sizes estimated for each intervention subcomponent, e.g. 2x2 design, separate evaluations reported in 1 study.</p> <p>If yes, code as - "Multiple components, but evaluated separately"</p> <p>If no, code as - "Multiple components, not evaluated separately"</p>
	intervention_domain	<p>Code the primary intervention domain in which the intervention takes place:</p> <p>-A. Food supply chain</p> <p>-B. Food environment</p> <p>-C. Consumer behaviour</p>
	intervention_group	<p>Code the primary domain in which the intervention takes place:</p> <ul style="list-style-type: none"> • FSC: Food production system • FSC: Food distribution and storage • FSC: Food processing and packaging • FSC: Food loss and waste management • FE: Food availability and affordability • FE: Promotion and labelling • FE: Food quality and safety • CB: Women's empowerment and decision-making • CB: Information/BCC
	intervention_subgroup	<p>Select all intervention groups that apply according to the sub-domain indicated in previous column. For two or more intervention groups in one sub-domain, enter in a new row.</p> <p>See interventions sheet for definitions</p>
	intervention_description	<p>Verbatim from study and page number. Please report up to 3 sentences only that explain in basic terms what the intervention is.</p>
Framework - Outcome	outcome_type	<p>Code the outcome type as stated in the publication:</p> <p>-Final</p> <p>-Intermediate</p> <p>These are listed and categorised in the "outcomes" tab"</p>
	outcome_group	<p>Code the primary outcome category as stated in the publication:</p> <ul style="list-style-type: none"> • FIN: Anthropometric • FIN: Micronutrient status • FIN: Diet quality and adequacy

Code	Sub-code	Description
		<ul style="list-style-type: none"> • FIN: Food safety • FIN: Food affordability and availability • INT: Economic • INT: Agricultural • INT: Bio nutritional outcomes • INT: Advertising and labelling • INT: Food distribution • INT: Environmental impacts of the food system • INT: Food loss • INT: Intrinsic motivators • INT: Women's empowerment • INT: Regulatory • INT: Changes in time use • INT: Adoption of promoted behaviours <p>INT = Intermediate outcome FIN = Final outcome</p>
	outcome_subgroup	<p>Select all outcome sub-groups that apply according to the main outcome group indicated in the previous column. For two or more outcome sub-groups in one main outcome group, enter a new row.</p> <p>See outcomes sheet for definitions</p>
	outcome_description	Verbatim from study and page number.

Appendix F: Systematic review critical appraisal tool

This is a checklist for making judgements about how much confidence to place in a systematic review of effects. The checklist has been adapted from Supporting the Use of Research Evidence (SURE) Collaboration. SURE, checklist for making judgements about how much confidence to place in a systematic review.

Table D1: Systematic review critical appraisal

Question	Criteria
Section A: Methods used to identify, include and critically appraise studies	
A.1 Were the criteria used for deciding which studies to include in the review reported? Did the authors specify: Types of studies Participants/ settings/ population Intervention(s) Outcome(s)	Yes; partially; no; can't tell <i>Coding guide - check the answers above</i> <i>YES: All four should be yes</i> <i>NO: All four should be no</i> <i>PARTIALLY: Any other</i>
A.2 Was the search for evidence reasonably comprehensive? Were the following done: Language bias avoided (no restriction of inclusion based on language) No restriction of inclusion based on publication status Relevant databases searched (<u>Minimum criteria</u> : All reviews should search at least one source of grey literature such as Google; for health: Medline/ Pubmed + Cochrane Library; for social sciences IDEAS + at least one database of general social science literature and one subject specific database) Reference lists in included articles checked Authors/experts contacted	Yes; partially; no; can't tell <i>Coding guide - check the answers above:</i> <i>YES: All five should be yes</i> <i>PARTIALLY: Relevant databases and reference lists are both reported</i> <i>NO: Any other</i>

Question	Criteria
<p>A.3 Does the review cover an appropriate time period? <i>Is the search period comprehensive enough that relevant literature is unlikely to be omitted?</i></p>	<p>Yes; can't tell (only use if no information about time period for search); no; unsure Coding guide: YES: Generally, this means searching the literature at least back to 1990 NO: Generally, if the search does not go back to 1990 CAN'T TELL: No information about time period for search Note: With reference to the above – there may be important reasons for adopting different dates for the search, e.g. depending on the intervention. If you think there are limitations with the timeframe adopted for the search which have not been noted and justified by the authors, you should code this item as a NO and specify your reason for doing so in the comment box below. Older reviews should not be downgraded, but the fact that the search was conducted some time ago should be noted in the quality assessment. Always report the time period for the search in the comment box.</p>
<p>A.4 Was bias in the selection of articles avoided? Did the authors specify: Independent screening of full text by at least 2 reviewers List of included studies provided List of excluded studies provided</p>	<p>Yes; partially; no Coding guide: YES: All three should be yes, although reviews published in journals are unlikely to have a list of excluded studies (due to limits on word count) and the review should not be penalised for this. PARTIALLY: Independent screening and list of included studies provided are both reported NO: All other. If list of included studies provided, but the authors do not report whether or not the screening has been done by 2 reviewers review is downgraded to NO.</p>
<p>A.5 Did the authors use appropriate criteria to assess the quality and risk of bias in analysing the studies that are included? The criteria used for assessing the quality/ risk of bias were reported A table or summary of the assessment of each included study for each criterion was reported Sensible criteria were used that focus on the quality/ risk of bias (and not other qualities of the studies, such as precision or applicability/external validity). "Sensible" is defined as a recognised quality appraisal tool/ checklist, or similar tool which assesses bias in included studies. Please see footnotes for details of the main types of bias such a tool should assess.</p>	<p>Yes; partially; no Coding guide: YES: All three should be yes PARTIALLY: The first and third criteria should be reported. If the authors report the criteria for assessing risk of bias and report a summary of this assessment for each criterion, but the criteria may be only partially sensible (e.g. do not address all possible risks of bias, but do address some), we downgrade to PARTIALLY. NO: Any other</p>

Question	Criteria
<p>A.6 Overall – how much confidence do you have in the methods used to identify, include and critically appraise studies?</p> <p><i>Summary assessment score A relates to the 5 questions above.</i></p> <p><i>High confidence applicable when the answers to the questions in section A are all assessed as ‘yes’</i></p> <p><i>Low confidence applicable when any of the following are assessed as ‘NO’ above: not reporting explicit selection criteria (A1), not conducting reasonably comprehensive search (A2), not avoiding bias in selection of articles (A4), not assessing the risk of bias in included studies (A5)</i></p> <p><i>Medium confidence applicable for any other – i.e. section A3 is assessed as ‘NO’ or ‘can’t tell’ and remaining sections are assessed as ‘partially’ or ‘can’t tell’</i></p>	<p>Low confidence (limitations are important enough that the results of the review are not reliable)</p> <p>Medium confidence (limitations are important enough that it would be worthwhile to search for another systematic review and to interpret the results of this review cautiously, if a better review cannot be found)</p> <p>High confidence (only minor limitations)</p>
<p>Section B: Methods used to analyse the findings</p>	
<p>B.1 Were the characteristics and results of the included studies reliably reported?</p> <p>Was there:</p> <ul style="list-style-type: none"> • Independent data extraction by at least 2 reviewers • A table or summary of the characteristics of the participants, interventions and outcomes for the included studies • A table or summary of the results of all the included studies 	<p>Yes; no; partially; not applicable (e.g. no included studies)</p> <p><i>Coding guide:</i></p> <p><i>YES: All three should be yes</i></p> <p><i>PARTIALLY: Criteria one and three are yes, but some information is lacking on second criteria.</i></p> <p><i>NO: None of these are reported. If the review does not report whether data was independently extracted by 2 reviewers (possibly a reporting error), we downgrade to NO.</i></p> <p><i>NOT APPLICABLE: if no studies/no data</i></p>
<p>B.2 Are the methods used by the review authors to analyse the findings of the included studies clear, including methods for calculating effect sizes if applicable?</p>	<p>Yes; partially; no; not applicable</p> <p><i>Coding guide:</i></p> <p><i>YES: Methods used clearly reported. If it is clear that the authors use narrative synthesis, they don't need to say this explicitly.</i></p> <p><i>PARTIALLY: Some reporting on methods but lack of clarity</i></p> <p><i>NO: Nothing reported on methods</i></p> <p><i>NOT APPLICABLE: if no studies/no data</i></p>

Question	Criteria
<p>B.3 Did the review describe the extent of heterogeneity?</p> <p>Did the review ensure that included studies were similar enough that it made sense to combine them, sensibly divide the included studies into homogeneous groups, or sensibly conclude that it did not make sense to combine or group the included studies?</p> <p>Did the review discuss the extent to which there were important differences in the results of the included studies?</p> <p>If a meta-analysis was done, was the I², chi square test for heterogeneity or other appropriate statistic reported? If no statistical test was reported, is a qualitative justification made for the use of random effects?</p>	<p>Yes; partially; no; not applicable</p> <p><i>Coding guide:</i></p> <p><i>YES: First two should be yes, and third category should be yes if applicable should be yes</i></p> <p><i>PARTIALLY: The first category is yes</i></p> <p><i>NO: Any other</i></p> <p><i>NOT APPLICABLE: if no studies/no data</i></p>
<p>B.4 Were the findings of the relevant studies combined (or not combined) appropriately relative to the primary question the review addresses and the available data?</p> <p>How was the data analysis done?</p> <p>Descriptive only</p> <p>Vote counting based on direction of effect</p> <p>Vote counting based on statistical significance</p> <p>Description of range of effect sizes</p> <p>Meta-analysis</p> <p>Meta-regression</p> <p>Other: specify</p> <p>Not applicable (e.g. no studies or no data)</p> <p>How were the studies weighted in the analysis?</p> <p>Equal weights (this is what is done when vote counting is used)</p> <p>By quality or study design (this is rarely done)</p> <p>Inverse variance (this is what is typically done in a meta-analysis)</p> <p>Number of participants (sample size)</p> <p>Other: specify</p> <p>Not clear</p> <p>Not applicable (e.g. no studies or no data)</p> <p>Did the review address unit of analysis errors?</p> <p>Yes - took clustering into account in the analysis (e.g. used intra-cluster correlation coefficient)</p> <p>No, but acknowledged problem of unit of analysis errors</p> <p>No mention of issue</p> <p>Not applicable - no clustered trials or studies included</p>	<p>Yes; partially; no; not applicable (e.g. no studies or no data); can't tell.</p> <p><i>Coding guide:</i></p> <p><i>YES: If appropriate table, graph or meta-analysis AND appropriate weights AND unit of analysis errors addressed (if appropriate).</i></p> <p><i>PARTIALLY: If appropriate table, graph or meta-analysis AND appropriate weights AND unit of analysis errors not addressed (and should have been).</i></p> <p><i>NO: If narrative OR vote counting (where quantitative analyses would have been possible) OR inappropriate reporting of table, graph or meta-analyses.</i></p> <p><i>NOT APPLICABLE: if no studies/no data</i></p> <p><i>CAN'T TELL: if unsure (note reasons in comments below)</i></p>

Question	Criteria
<p>B.5 Does the review report evidence appropriately? The review makes clear which evidence is subject to low risk of bias in assessing causality (attribution of outcomes to intervention), and which is likely to be biased, and does so appropriately Where studies of differing risk of bias are included, results are reported and analysed separately by risk of bias status</p>	<p>Yes; partially; no; not applicable <i>Coding guide:</i> YES: Both criteria should be fulfilled (where applicable) NO: Criteria not fulfilled PARTIALLY: Only one criterion fulfilled, or when there is limited reporting of quality appraisal (the latter applies only when inclusion criteria for study design are appropriate) NOT APPLICABLE: No included studies <i>Note on reporting evidence and risk of bias:</i> For reviews of effects of 'large n' interventions, experimental and quasi-experimental designs should be included (if available). For reviews of effects of 'small n' interventions, designs appropriate to attribute changes to the intervention should be included (e.g. pre-post with assessment of confounders)</p>
<p>B.6 Did the review examine the extent to which specific factors might explain differences in the results of the included studies? Were factors that the review authors considered as likely explanatory factors clearly described? Was a sensible method used to explore the extent to which key factors explained heterogeneity? Descriptive/textual Graphical Meta-analysis by sub-groups Meta-regression Other</p>	<p>Yes; partially; no; not applicable <i>Coding guide:</i> YES: Explanatory factors clearly described and appropriate methods used to explore heterogeneity PARTIALLY: Explanatory factors described but for meta-analyses, sub-group analysis or meta-regression not reported (when they should have been) NO: No description or analysis of likely explanatory factors NOT APPLICABLE: e.g. too few studies, no important differences in the results of the included studies, or the included studies were so dissimilar that it would not make sense to explore heterogeneity of the results</p>
<p>B.7 Overall - how much confidence do you have in the methods used to analyse the findings relative to the primary question addressed in the review? <i>Summary assessment score B relates to the 5 questions in this section, regarding the analysis.</i> <i>High confidence applicable when all the answers to the questions in section B are assessed as 'yes'.</i> <i>Low confidence applicable when any of the following are assessed as 'NO' above: critical characteristics of the included studies not reported (B1), not describing the extent of heterogeneity (B3), combining results inappropriately (B4), reporting evidence inappropriately (B5).</i> <i>Medium confidence applicable for any other: i.e. the "Partial" option is used for any of the 6 preceding questions or questions and/or B.2 and/ or B.6 are assessed as 'no'.</i></p>	<p>Low confidence (limitations are important enough that the results of the review are not reliable) Medium confidence (limitations are important enough that it would be worthwhile to search for another systematic review and to interpret the results of this review cautiously, if a better review cannot be found) High confidence (only minor limitations)</p>

Question	Criteria
Section C: Overall assessment of the reliability of the review	
C.1 Are there any other aspects of the review not mentioned before which lead you to question the results?	Additional methodological concerns – only one person reviewing Robustness Interpretation Conflicts of interest (of the review authors or for included studies) Other No other quality issues identified
C.2 Are there any mitigating factors which should be considered in determining the reviews reliability?	Limitations acknowledged No strong policy conclusions drawn (including in abstract/ summary) Any other factors
<p>C.3 Based on the above assessments of the methods how would you rate the reliability of the review?</p> <p>Low confidence in conclusions about effects:</p> <p>Medium confidence in conclusions about effects: The systematic review has the following limitations...</p> <p>High confidence in conclusions about effects: If applicable: The review has the following minor limitations... <i>Coding guide:</i></p> <p>High confidence in conclusions about effects: high confidence noted overall for sections A and B, unless moderated by answer to C1.</p> <p>Medium confidence in conclusions about effects: medium confidence noted overall for sections A or B, unless moderated by answer to C1 or C2.</p> <p>Low confidence in conclusions about effects: low confidence noted overall for sections A or B, unless moderated by answer to C1 or C2.</p> <p>Limitations should be summarised above, based on what was noted in Sections A, B and C.</p>	

Appendix G: References

Included impact evaluations

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