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# Just Rural Transitions Support Programme:

## Rapid Evidence Review on approaches for agricultural subsidy repurposing and overall sustainable agricultural policy reform

**March 2026**

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This rapid evidence review was prepared by Agulhas Applied Knowledge under the overall supervision of Liz Turner. The views expressed in this report are those of the authors only.

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## ABBREVIATIONS

| | |
|---|---|
| ABC Cerrado Project | Sustainable Production in Areas Already Converted for Agricultural Use |
| ABC Plan | Sectorial Plan for Mitigation and Adaptation to Climate Change for the Consolidation of a Low Carbon Economy in Agriculture |
| ADLI | Agricultural Development-Led Industrialisation |
| ADR | Agricultural Development Resilience |
| AIP | Affordable Inputs Program |
| AKIS | Agriculture Knowledge and Innovation System |
| AP | Swiss Agricultural Policy (2014 – 2017) |
| ATVET | Agricultural Technical and Vocational Education and Training |
| AVC | Agricultural value chains |
| CA | Conservation Agriculture |
| CSA | Climate Smart Agriculture |
| DyTAES | Dynamique pour une Transition Agroécologique au Sénégal |
| EU CAP | European Union Common Agricultural Policy |
| FAO | Food and Agriculture Organization |
| FASDEP | Food and Agriculture Sector Development Project |
| FCDO | Foreign, Commonwealth & Development Office |
| FESN | Famous, Excellent, Special and New |
| FISP | Farm Input Subsidy Programme |
| FTC | Farmer Training Centre |
| GHG | Greenhouse gas |
| GOPCA | Gujarat Organic Products Certification Agency |
| HMCLT | Heavy metal-contaminated cultivated land |
| INT | Infrastructure and technological |
| JRTSP | Just Rural Transition Support Programme |
| LSAI | Large Scale Agricultural Investments |
| MASAF | Malawi Social Action Fund |
| MSME | Micro, small, and medium-sized enterprise |
| NAIVS | National Agricultural Input Voucher Scheme |
| NGO | Non-governmental organisation |
| NPOF | National Project on Organic Farming |
| NRA | Nominal Rate of Assistance |
| NRP | Nominal Rate of Protection |
| NSA | Non-state actor |
| ODA | Official Development Assistance |
| OECD | Organisation for Economic Co-operation and Development |
| PADETES | Participatory Demonstration and Training Extension System |
| PDHC II | Dom Hélder Câmara Project |
| PES | Payment for Ecosystem Servies |
| PICO | Population, Intervention, Comparison, Outcome |
| PNAE | National School Feeding Program |
| PNATER | Extension and Advisory Service Program |
| PRACAS | Programme d'accélération de la cadence de l'agriculture sénégalaise |

| | |
|---|---|
| PRONAF | National Programme to Strengthen Family Farming |
| RCTP | Rural Clustering and Transformation Project |
| RER | Rapid Evidence Review |
| RTFR | Rural tax-and-fees reform |
| SDGs | Sustainable Development Goals |
| SSA | Sub-Saharan Africa |
| TA | Technical Assistance |
| TCI | Total Cost Insurance |
| ToC | Theory of Change |
| ZBNF | Zero Budget Natural Farming |

## 1. INTRODUCTION

This rapid evidence review (RER) **synthesises evidence and contributes towards learning on approaches for agricultural subsidy repurposing and overall sustainable agricultural policy reform**. The exercise will be used to review and test the Just Rural Transition Support Programme (JRTSP) Theory of Change (ToC), identifying gaps where evidence is weakest for further/deeper exploration during evaluations.

The RER identifies effective interventions **specifically for agricultural subsidy repurposing, as well as wider agricultural policy reform** to:

- Drive investment into sustainable agriculture practices that deliver 'triple wins'
- Help farmers build resilience
- Support governments in repurposing agricultural subsidies and generally promoting and mainstreaming sustainable agriculture across various policy instruments
- Build resilient agriculture systems
- Support sustainable agriculture transition
- Contribute towards a just rural transition

**Note:** This review aligns with the JRTSP ToC developed during the Inception phase of the monitoring, evaluation and learning (MEL) component.

## 2. REVIEW APPROACH

This review aims to:

i. Map and identify the current landscape of policies, regulations, interventions and incentives (including repurposing of agricultural subsidies, access to finance) to support farmers to adopt sustainable agriculture practices.
ii. Explore evidence for the extent to which these policies, regulations, interventions and incentives/subsidies are supporting a transition towards more sustainable agriculture practices.
iii. Identify gaps in the literature and potential priorities for the evaluation, future policy development and JRTSP/Official Development Assistance (ODA) programming.

The first stage in the evidence review was to carry out a landscape mapping, analysing the extent of evidence ('what evidence is there?'), before proceeding to the second stage of review: 'what the evidence tells us'. Each stage was supported by an overarching question.

*EVIDENCE GAP QUESTION:*

Is there evidence for [*different agricultural subsidy repurposing and policy reform options*], and the conditions under which these are effective [*e.g. political economy dimensions/contextual factors/enablers & barriers*], to support opportunities for farmers [*including smallholder and marginalised farmers, e.g., women, indigenous peoples, and the rural poor*] to adopt sustainable, resilient, and climate sensitive agricultural practices?

*RAPID EVIDENCE REVIEW QUESTION:*

What does the evidence tell us about the effectiveness of different agricultural subsidy repurposing and policy reform options in supporting opportunities for and adoption of sustainable, resilient, and climate sensitive agricultural practices, contributing towards a just rural transition? By and for whom?

**See the review protocol for more information on process, search terms, inclusion criteria and quality assessment (Annex 1).**

Policy interventions were grouped as:

- Governance support
- Targeted financial incentives
- Subsidy repurposing
- Reform of policy/support (including pilots)
- Reorientation of policy/support (including pilots)
- Regulations
- Other measures by government to support sustainable, just and resilient agricultural systems
    - Extension services
    - Infrastructure investment
    - Certification/Labelling
    - Trade measures
    - Tax reform
    - Land tenure /rights /redistribution

## LIMITATIONS OF THE APPROACH

The RER required restrictions in the methods – vis à vis a systematic review – to be able to conduct a **rigorous review covering robust evidence with limited resources and within a short timeframe**, so that the review would be available for use at Baseline.

The scope of the research searched and reviewed was restricted to the timeframe of 2019 onwards. The rationale for this was that other reviews had recently been commissioned by FCDO[1] that catch earlier, relevant evidence. To further mitigate the risk of excluding earlier, relevant studies key to the evidence base for subsidy repurposing in particular, back-citations were recorded in the data extract form and subsequently followed-up.

The inclusion and exclusion criteria (Population, Intervention, Comparison, Outcome (PICOs)) also necessarily led us to a relatively limited sample of the literature. The types of literature included in the review lean towards peer-reviewed journal articles by virtue of the methodology used. **Evidence gaps are most evident for key contributors in the ToC as well as policy/advocacy by non-state actors and communities of practice. These factors are process-oriented or refer to 'mechanisms' and more likely to be captured using specific methodologies, e.g. realist approaches to evaluation, or to be found in grey literature and less formal project documentation.** To address this gap, limited hand

[1] See, for example Norrington-Davies, G., Wiggins, S., Duvendack, M., Greenleaf, A., Kelleher, M., & Tlhotlhalemaje, L. (2025). Saving farmers and the forest: Interventions to reduce deforestation, encourage sustainable farming, and enhance farmer welfare in and around moist tropical forest. A rapid evidence assessment. Foreign, Commonwealth & Development Office. https://doi.org/10.53832/evidence-fund.0023; Greene, S., Norrington-Davies, G., Duvendack, M., Hounzanme, N., Kelleher, M., Leavy, J., Macquarie, R., Pandit, S., & Tlhotlhalemaje, L. (2025). *Rapid Review: Effectiveness of climate change adaptation interventions in low- and middle-income countries*. Foreign, Commonwealth & Development Office. https://doi.org/10.53832/evidence-fund.0075

searches of the literature were included alongside database searches, with additional hand searches based on the evidence gaps.

A notable stage 1 (landscape mapping section 3.1) **evidence gap for the ToC related to policy and advocacy of non-state actors (NSAs) to support sustainable agriculture. This reflects where the evidence for this tends to 'sit', in organisational, programme and portfolio-related reports rather than formal and/or peer-reviewed literature**. It therefore fell largely outside our search frames and inclusion criteria. In focusing on agricultural transformations at the interface between changing agricultural practices, social movements and policy influence, NSA and communities of practice (CoP) work on agroecology and food sovereignty are key areas to consider when evidencing the shifting of policy and agricultural systems towards achieving the 'triple wins'. We added a third phase of **purposive hand searches focusing on agroecology and food sovereignty to the RER to partially fill this gap** (see **Section 3.3**).

A notable challenge in conducting the review was that even when studies fulfilled the inclusion criteria, a closer review revealed that **actual evidence for and deeper analysis of outcomes, including enablers and barriers for policy change to effect benefits for people, climate and nature, was often superficial. The review is transparent about where this is the case while presenting whatever learning is possible from the source.**

**Gaps and limitations remain.** First, gaps were identified in process responsive approaches that may be needed to effectively analyse or understand policy changes, for example NSA engagement in policy influencing, government policy reform processes such as under Sustainable Development Goals (SDG) 2030 transitions, and national Food Systems Solutions dialogues. Second, the analyses contained in included literature may be limited due to their framing, evidence base and/or methodological constraints that fall outside of the quality appraisal process.

## 3. FINDINGS

This section first sets out the findings of the landscape mapping to identify evidence gaps (**Section 3.1**), before moving to a more detailed analysis of what the literature tells us about policy interventions for sustainable agriculture and just rural transitions, including outcomes, enablers and barriers, (**Sections 3.2** and **3.3**)

### Box 1: How definitions of support varied and aligned with our PICOs

**Agricultural support** refers to any form of financial support for agriculture resulting from government policies. It covers various types of measures implicitly or explicitly affecting farm gate prices, as well as monetary transfers to farmers or public expenditure and investments in general services and public goods that benefit the agricultural sector. However, it does not account for subsidies or transfers to food consumers.

**Agricultural producer support** (or support to producers) consists of transfers to individual farmers, in the form of both price incentives and fiscal subsidies. In this report, these forms of agricultural producer support are quantified by the nominal rate of assistance (NRA), as defined below. The definition of "agricultural producer support" used in this report does not include transfers to the agriculture sector collectively, in the form of general services or public goods.

**Price (dis)incentives** are policy measures (mainly border measures and domestic price interventions) that generate a gap between the domestic producer price and the border price of a specific agricultural commodity. They represent implicit transfers from consumers and taxpayers to farmers (or vice versa) and are measured by the nominal rate of protection (NRP), as defined below. As such, these policy measures either protect (i.e. incentivise) or penalise (i.e. disincentivise) agricultural producers, as denoted by a positive

or negative NRP, respectively. Border measures refer to policy measures that affect international trade and consequently influence domestic prices. As such, these are policies that relate to import and export flows through the imposition of tariffs, taxes, quotas or subsidies. Restrictions and subsidies of this sort can generate price incentives or disincentives, as they cause domestic prices to diverge from the border price of a commodity.

**Fiscal subsidies** are monetary (budget) transfers made by governments in the context of policy measures, projects and programmes to specific private actors of the agriculture sector. This report only considers fiscal subsidies targeting farmers. These transfers make use of public budgets and may be funded by domestic taxpayers or international donors.

**Coupled support** consists of measures that are targeted depending on certain characteristics of agricultural production: for example, the type of inputs used, or the type or amount of agricultural output produced. This means that to be a beneficiary, the farmer must produce a certain crop or livestock (World Bank, 2020).

**Decoupled support** refers to fiscal subsidies that do not depend on the commodity produced or on the inputs used for producing a specific commodity (World Bank, 2020).

Fiscal support can also benefit the agriculture sector collectively, instead of targeting individual producers, through the provision of **general sector services and public goods**. In the long term, some of these alternative types of support reduce costs and create an enabling environment for farming and food system marketing activities, through the development of private or public services, institutions and infrastructure. Examples of general sector services include:

- agricultural knowledge generation and transfer (e.g. training, technical assistance);
- inspection and control concerning agricultural product safety, pests and diseases;
- infrastructure development and maintenance, such as roads, irrigation and storage facilities;
- public food reserves and stockholding schemes;
- food system marketing and trade promotion.

In the Food and Agriculture Organization (FAO) framework, 'reform' and 'repurpose' are closely linked but distinct concepts. Aligning with the Organisation for Economic Co-operation and Development (OECD) definition, **the report defines policy reform as the process in which changes are made to the formal 'rules of the game' – laws, regulations, and institutions – while repurposing refers to a broader, strategic shift in what policies aim to achieve** (FAO et al. 2021).

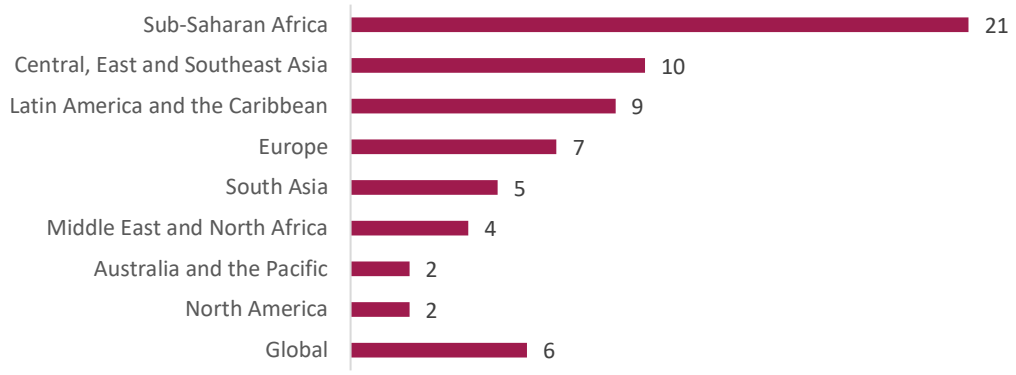
## 3.1. LANDSCAPE ANALYSIS

44 studies were included for data extraction; this included 26 peer-reviewed articles, five research synthesis/literature reviews, four programme reports/evaluations, four working/discussion papers, two systemic reviews, one case study, and one impact evaluation.

### 3.1.1. GEOGRAPHY

The most prevalent regions were: Sub-Saharan Africa (SSA) (21 studies); Central, East and Southeast Asia (10 studies); Latin America and the Caribbean (9 studies); and Europe (7 studies). Six studies were global in nature, providing general insight on their themes. There were fewer studies from: South Asia (5 studies); Middle East and North Africa (4 studies); North America (2 studies); and Australia and the Pacific (2 studies).

**Figure 1: Regional breakdown**




The 44 studies covered 163 countries, many of which covered several countries or regions. The most prevalent countries were Brazil (10 studies); China (9 studies); the United States (9 studies); and Malawi (8 studies). See **Table 1** for the country breakdown. Most countries were only referenced in one or two studies.

**Table 1: Country breakdown**

| | |
|---|---|
| 10 studies | Brazil |
| 9 studies | China and the United States |
| 8 studies | Malawi |
| 7 studies | Ethiopia and India |
| 6 studies | South Africa |
| 5 studies | Czech Republic, Estonia, France, Hungary, Poland, Slovenia and United Kingdom |
| 4 studies | Australia, Austria, Belgium, Canada, Chile, Denmark, Finland, Germany, Ghana, Greece, Iceland, Indonesia, Ireland, Israel, Italy, Japan, South Korea, Latvia, Lithuania, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Tanzania and Turkey |
| 3 studies | Argentina, Central African Republic, Colombia, Costa Rica, Kenya, Mali, Slovakia, Zambia |
| 2 studies | Angola, Benin, Bulgaria, Burkina Faso, Chad, Croatia, Cyprus, Eritrea, eSwatini, Guatemala, Kazakhstan, Kyrgyzstan, Liberia, Malta, Mauritius, Moldova, Morocco, Mozambique, Myanmar, Nigeria, Oman, Philippines, Romania, Russia, Saudi Arabia, Senegal, Somalia, South Sudan, Sri Lanka, Tunisia, Uganda, Ukraine and Zimbabwe |
| 1 study | Afghanistan, Albania, Algeria, Armenia, Azerbaijan, Bahamas, Bangladesh, Belarus, Belize, Bolivia, Bosnia and Herzegovina, Botswana, Burundi, Cabo Verde, Cambodia, Cameroon, Comoros, DRC, Cuba, Djibouti, Dominican Republic, East Timor, Ecuador, Egypt, El Salvador, Fiji, Gabon, Gambia, Georgia, Guinea-Bissau, Guyana, Haiti, Honduras, Iran, Iraq, Jamaica, Jordan, Kuwait, Laos, Lebanon, Lesotho, Madagascar, Malaysia, Maldives, Mauritania, Mongolia, Montenegro, Namibia, Nepal, Nicaragua, North Macedonia, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Rwanda, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Sao Tome and Principe, Serbia, Sierra Leone, Solomon Islands, Suriname, Syria, Tajikistan, Thailand, Togo, Trinidad and Tobago, Turkmenistan, United Arab Emirates, Uruguay, Uzbekistan, Vanuatu, Venezuela, Vietnam and Yemen |

**Evidence gaps:** There were far fewer studies covering South Asia, the Middle East and North Africa, Australia and the Pacific.

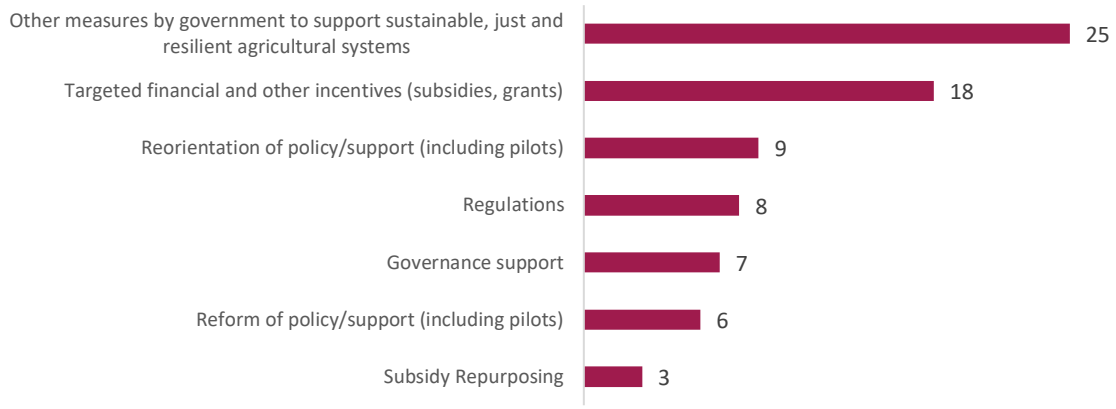
### 3.1.2. TYPES OF INTERVENTION

The 44 studies covered a wide array of interventions. We grouped them into categories, noting specific interventions. The most common intervention category was 'other measures to support sustainable, just and resilient agricultural systems', captured within 25 studies. This was the catch-all category for all 'other interventions'. Common 'other' interventions include:

- Extension services (training, Technical Assistance (TA))
- Infrastructure investment
- Certification/Labelling
- Trade measures
- Tax reform
- Land tenure/rights/redistribution

The next most prevalent intervention category was 'targeted financial and other incentives', captured in 18 studies. Less common interventions were: reorientation of policy/support (9 studies); regulations (8 studies); governance support (7 studies); reform of policy/support (6 studies) and subsidy repurposing (3 studies).

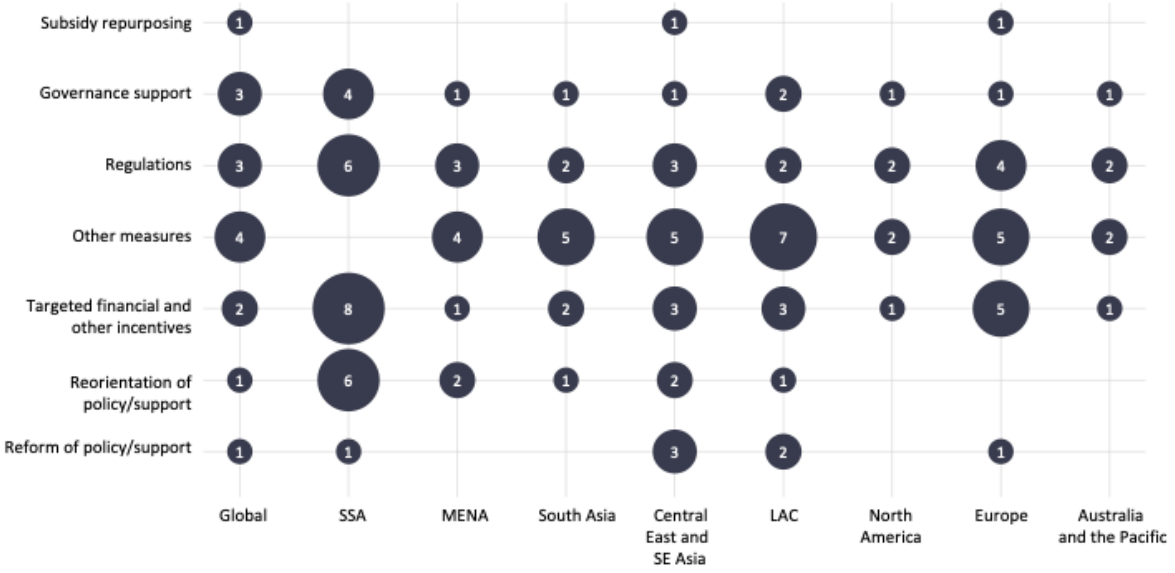
**Figure 2: Intervention categories**




We also looked at intervention type mapped against geographic region to try to understand if certain interventions were more common in certain regions (see **Figure 3**). This bubble map also illustrates gaps in the landscape of studies. For example, there are **no studies on subsidy repurposing in Africa or Latin America and the Caribbean**.

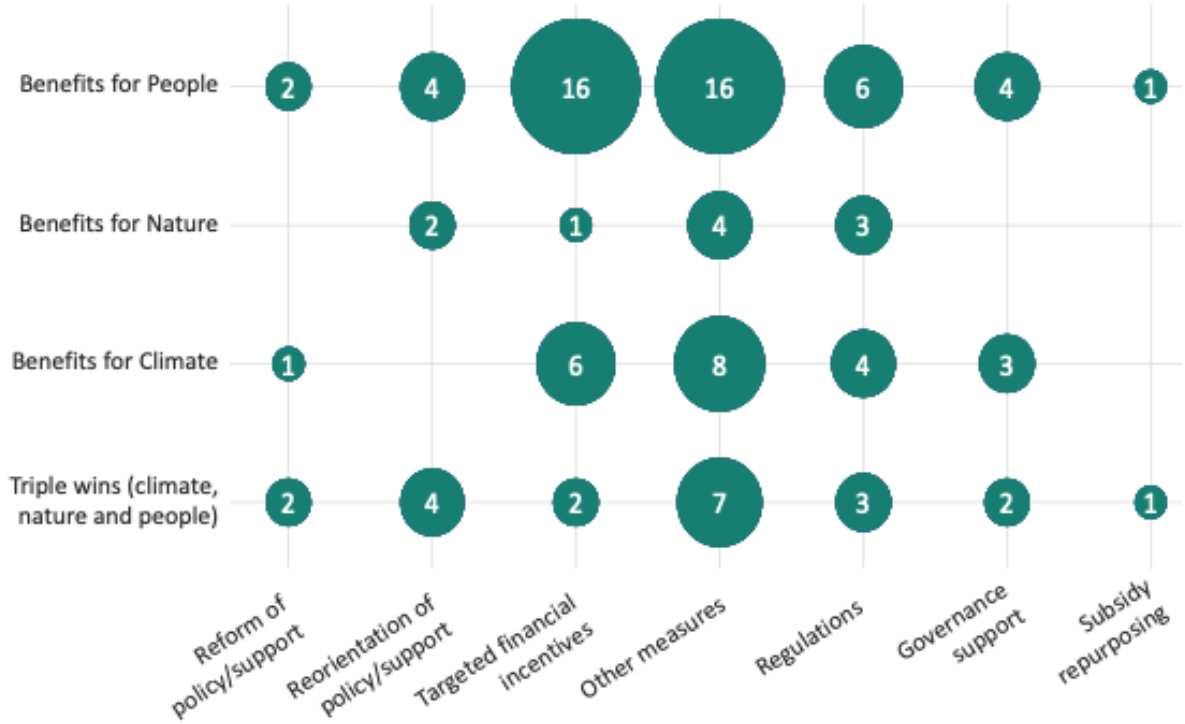
However, there are some bubbles that show high incidence of interventions in certain regions. The biggest bubble is for targeted financial and other incentives in SSA (8 studies). There are also big bubbles for other measures by government to support sustainable, just and resilient agricultural systems in Latin America and the Caribbean (7 studies); regulations in SSA (6 studies); and reorientation of policy/support in SSA (6 studies).

**Figure 3: Bubble map showing intervention type mapped against geography**




Intervention type was mapped against impact areas to try and see the correlation between types of interventions and outcomes. The bubble map in **Figure 4** illustrates these associations. The largest bubbles are for targeted financial and other incentives and benefits for people (16 studies); and other measures and benefits for people (16 studies). There is also a notable overlap in studies between other measures and benefits for climate (8 studies); other measures and 'triple wins' (7 studies); targeted financial and other incentives and benefits for climate (6 studies); and regulations and benefits for people (6 studies). This figure also illustrates where there are gaps in the evidence, for example in the overlap between subsidy repurposing and benefits for nature/climate, and reform of policy/support and benefits for nature.

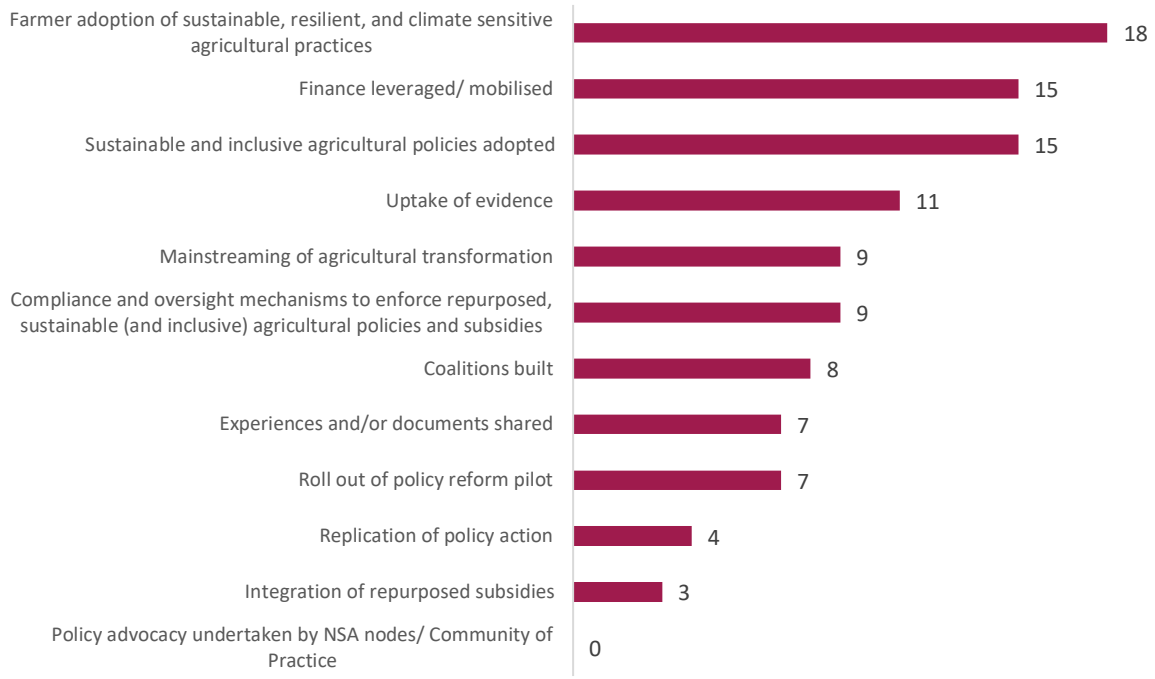
**Figure 4: Bubble map showing intervention type mapped against impact**



### 3.1.3. OUTCOME AREAS

The 44 studies cover a range of outcomes. The most cited outcomes were farmer adoption of sustainable, resilient, and climate sensitive agricultural practices (18 studies); sustainable and inclusive agricultural policies adopted (15 studies); and finance leveraged/mobilised (15 studies).

**Figure 5: Outcome areas**




**Evidence gaps:** The evidence gaps are largest around policy advocacy/communities of practice (no studies – see limitations discussion in **Section 2** – although this is partially captured within other included studies, where policy and advocacy sit earlier in the ToC, for example actors driving through reforms that directly or indirectly support policy change). There are also gaps in relation to integration of repurposed subsidies (3 studies); and replication of policy action (4 studies).

We also looked at intervention type mapped against outcomes to try to understand the correlation between these two elements in the studies. The largest areas of overlap occurred in the other measures intervention type; outcomes within this intervention type included sustainable and inclusive agricultural policies adopted (12 studies); farmer adoption of sustainable, resilient and climate sensitive agricultural practices (10 studies); and finance leveraged/mobilised (10 studies). Other areas of high correlation include targeted financial and other incentives and finance leveraged/mobilised (9 studies); targeted financial and other incentives and farmer adoption of sustainable, resilient and climate sensitive agricultural practices (7 studies); and regulations and sustainable and inclusive agricultural policies adopted (6 studies).

Like the other bubble maps, this figure also reveals gaps in the evidence. We did not collect data on timeframes for the interventions covered by the studies, but the gap in evidence might reflect the longer timeframes needed for policy change to take place. Additionally, most interventions contribute

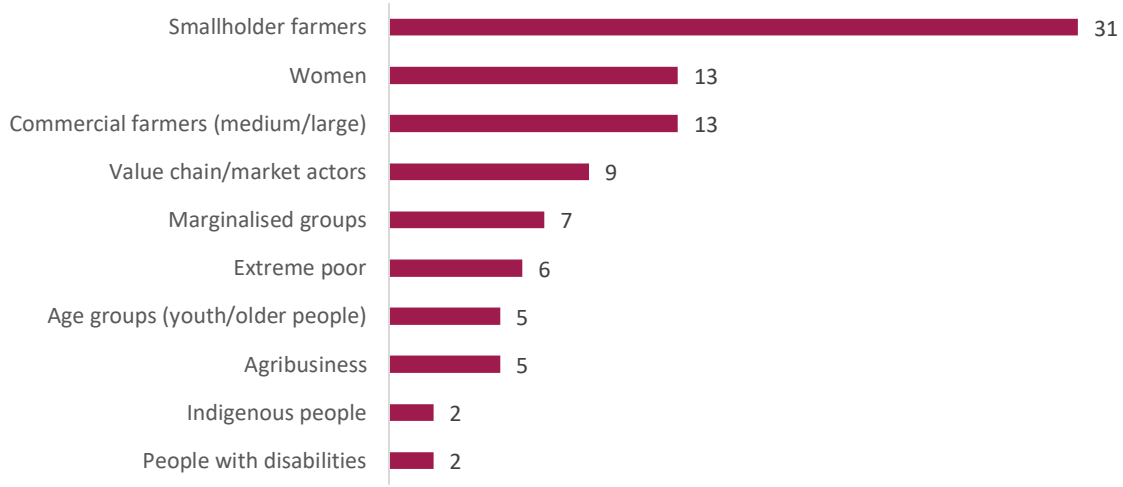
towards longer-term/higher-level outcomes alongside a suite of other factors, making it difficult to attribute observed changes directly to these interventions. Studies rarely take policy change as their starting point and trace back the different factors, including specific interventions, that contributed to it.

**Figure 6: Bubble map showing intervention type mapped against outcomes**


### 3.1.4. GROUPS TARGETED

Smallholder farmers were the most common group targeted (31 studies), followed by commercial farmers (13), and women (13).

**Figure 7: Groups targeted**



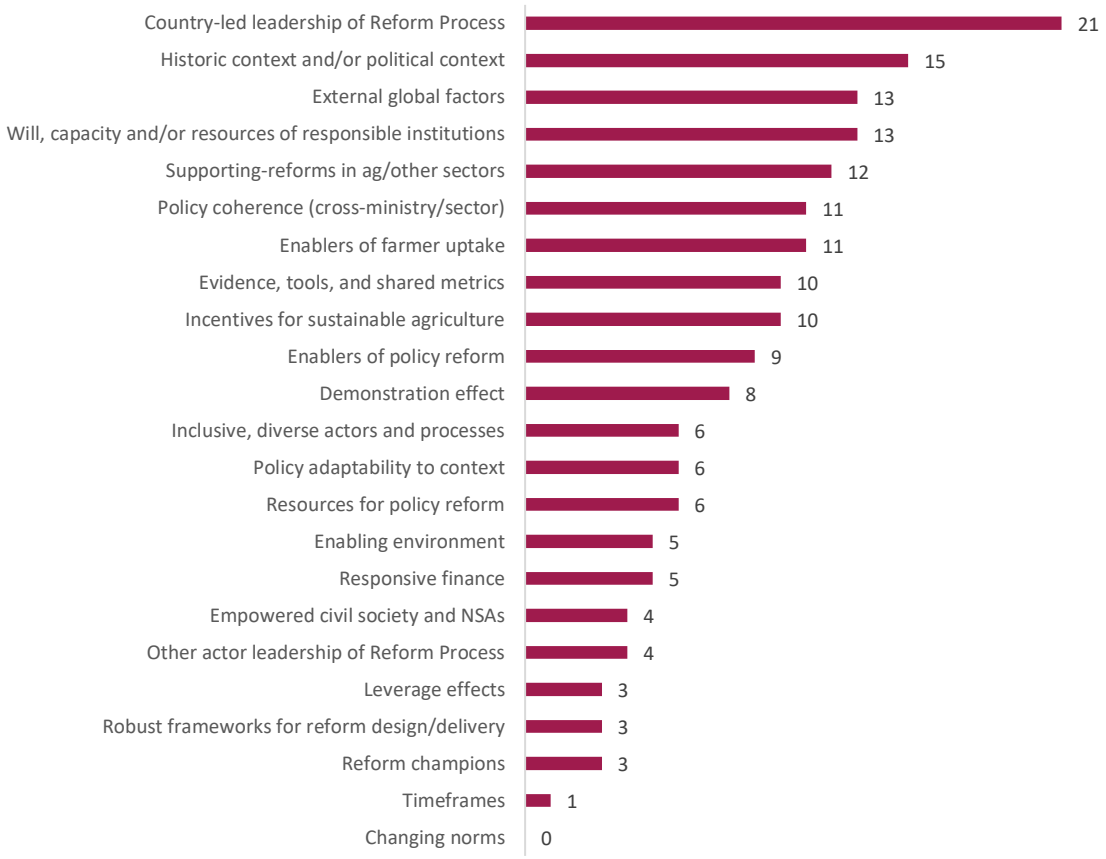
**Evidence gaps:** Very few interventions targeted people with disabilities (2 studies) or indigenous people (2 studies).

### 3.1.5. KEY CONTRIBUTORS IN THE TOC

The most cited ToC contributors include country-led leadership in reform process (21 studies); historical and/or political context (15 studies); will, capacity, and/or resources of responsible institutions (13 studies); and external global factors (13 studies). Studies also highlighted supporting reforms in agro/other sectors (12 studies); policy coherence across ministries/sectors (11 studies); and enablers of farmers uptake (11 studies) as key contributors.

Notable data gaps relate to changing norms (no studies); timeframes (one study), as well as reform champions, leverage effects, and robust frameworks for reform design/delivery (three studies each).

**Figure 8: Evidence for key contributors in the Theory of Change**




## 3.2. DETAILED ANALYSIS OF INTERVENTIONS, OUTCOMES, ENABLERS AND BARRIERS

Overall, studies were limited in terms of their discussion of outcomes, especially cross-cutting outcomes that are difficult to isolate in complex political, policy, environmental and economic contexts. Just four studies provided meaningful evidence of 'triple wins' (outcomes in sustainable agriculture interventions delivering benefits for climate, nature *and* people/health) (see **Box 2**). Several other studies mentioned 'triple wins' but did not provide detailed evidence of outcomes in the three areas. The rest of this section provides an overview of instruments by main policy intervention (outcome) in the JRTSP ToC, summarising available evidence for outcomes, barriers and enablers.

### Box 2: Evidence for 'Triple Wins'

Four studies provided evidence of 'triple wins' outcomes in sustainable agriculture interventions. These are interventions that deliver benefits for climate, nature *and* people/health. The analysis, however, is quite high level, and studies do not delve into the specific outcomes of each programme/policy, making it challenging to discern the actual impact of the interventions. One study discusses the adoption of sustainable agricultural practices through the Zero Budget Natural Farming model in India, another examines the effectiveness of the ABC Cerrado Project which delivered training and TA in Brazil, one covers the EU's Common Agricultural Policy, a large-scale agricultural policy with many different components, and one explores the outcomes of Brazil's National School Feeding Program.

**Zero Budget Natural Farming (ZBNF)** is an agricultural and rural development policy that promotes sustainable agricultural practices in the Indian state of Andhra Pradesh. This agroecological model aims to reduce the use of fertilisers and other synthetic agricultural inputs, and support the adoption of more sustainable and resilient farming methods (based on traditional farming methods). It aims to encourage chemical-free agriculture, reduce input costs and improve incomes. The study found that the adoption of these methods led to an increase in yields and a decline in costs (and thereby an improvement in livelihoods); benefits for biodiversity; and greater status for women in the community. Specifically, the authors report that 90% of surveyed farmers had increased yields, lower costs and improved livelihoods. Regarding improved biodiversity, around 7 times more earthworms were found per square meter in ZBNF fields compared to the control fields. The study suggested that if 25% of the total crop area in the state adopted ZBNF $70 million would be saved in fertilizer subsidies annually. The study did not go into detail on the barriers that would prevent this growth, or the enablers that had led to the reported successes. ZBNF has been practiced in India since the 1990s and has gained prominence in more recent years, highlighting the importance of longer timeframes available for impacts to unfold.

The **ABC Cerrado Project** (also known as the Sustainable Production in Areas Already Converted for Agricultural Use) in Brazil (da Silva et al, 2021) promotes the adoption of sustainable, low-carbon agricultural practices by small and medium farmers. It forms one component of the Sectorial Plan for Mitigation and Adaptation to Climate Change for the Consolidation of a Low Carbon Economy in Agriculture (the ABC Plan). Specifically, the ABC Cerrado Project aimed to encourage sustainable agricultural practices in order to reduce GHG emissions, boost productivity and income, and preserve the environment. The intervention took place between 2014 and 2019 in eight states, and included a pilot training and TA programme focused on concepts of low-carbon agriculture. The technologies/practices that farmers were trained in included recovery of degraded pastures, crop-livestock-forest integration, no-tillage system, and planted forests. The authors found evidence of "improvement in the environmental performance of farms assisted by the ABC Cerrado Project." The specific results included 7,800 rural producers trained, 93,800 hectares of pasture area recovered, 214,000 hours of technical and managerial assistance delivered, and 18,000 people benefitted. They noted that the quality of cattle and pasture management improved through the replacement of native pastures and the recovery of degraded ones. There was also an intensification of beef cattle in the area. The farms that were part of the pilots also performed better in capturing carbon, resulting in carbon mitigated. They found that "*these farms sequestered 458,906 t $CO_2$e in an area of 112,699 ha*." They noted that results were not consistent across all states, with socioeconomic conditions and environmental conditions affecting outcomes. The training and TA delivered through the ABC Cerrado Project seems to have delivered triple wins, with people gaining improved knowledge and increased production, better pasture quality through improved management, and carbon mitigated through sustainable farming practices.

Beyond specific field interventions, broader policy shifts have shown 'triple win' potential. An OECD study on the **New Common Agricultural Policy (CAP)** in the EU found slight evidence of 'triple wins' (OECD 2023). The EU's CAP was originally launched in 1962, with this updated 2023 – 2027 version working towards the objectives of the European Green Deal (European Commission, no date). The ten key objectives are to ensure a fair income for farmers; to increase competitiveness; to improve the position of farmers in the food chain; climate change action; environmental care; to preserve landscapes and biodiversity; to support generational renewal; vibrant rural areas; to protect food and health quality; and to foster knowledge and innovation. €387 of funding has been allocated for the policy in the 2021-2027 period. Specific interventions include direct payments to farmers, risk management, investment support, and young farmer support. Authors noted that there was evidence of a small effect on income in farming communities (although some studies found evidence to the contrary). Additionally, they noted a "partial decoupling" of direct GHG emission from

production levels and a stable use of pesticides with increased levels of production. This study was conducted shortly after the policy came into effect, so there is not yet much evidence of outcomes. In terms of the barriers and enablers to the CAP, the study found that research and innovation play an important role in the policy's implementation. The broader climate context was also seen as important (e.g. other climate commitments, the Paris Agreement). Barriers included a lack of incentives to address GHG emissions; economic barriers; and a lack of data, reporting and evaluation. The study noted that the "implementation gap" between ambition and action was one reason for slow progress.

**The National School Feeding Program (PNAE)** is a Brazilian programme that supports food security through education and rural development (Valencia et al. 2021). The programme provides a 30% price premium for certified organic and agroecological products, while ensuring that the barrier to entry to produce certified products is lower for family farmers. The programme supports the elimination or reduction of use of chemical fertilizers, and supports forest preservation, increased biodiversity and the use of organic seeds. The programme enabled households to transition from input-intensive monocultures to diversified farming systems, and the incentive-driven certification schemes promoted sustainable agricultural practices in line with the programme's aims. Results on increased incomes were reported, as farmers gained access to more markets, thereby enhancing women's economic empowerment. The study found that women felt more empowered to make farm management decisions. There was also evidence of greater partnership between government agencies, NGOs and social movements aiming to shape agricultural reforms.

### 3.2.1. GOVERNANCE SUPPORT

#### WHAT DO WE MEAN BY GOVERNANCE SUPPORT?

Governance is the structure established to ensure policy-into-action and programme implementation are well-managed. It involves a set of policies, principles, standards, and practices that guide decision making i.e. the 'rules of the game'. Governance support refers to actions to support the establishment of 'rules of the game': the framework, structure, and processes that ensure a policy is effectively developed, implemented, and monitored to achieve its strategic objectives. It provides the authority and accountability for decision-making, guides actions, and includes establishing laws, regulations, and institutions as well as activities like setting organisational standards, promoting transparency, and overseeing performance[2].

#### OVERVIEW

Seven studies explore governance support for sustainable and inclusive agriculture, including climate sensitive agriculture and policy reform.

The types of governance support covered by the studies include the sets of laws and regulations to support smallholder farmers, those surrounding the (re-)introduction of farm input subsidies, for example in Malawi and Senegal (FAO et al. 2021). Notable large-scale policy frameworks that represent the governance structures for sustainable agriculture and just rural transitions include the EU Common Agriculture Policy; Sustainable Canadian Agricultural Policy Framework; the "No. 1 Document" in China – all covered in (OECD 2024). Governance support across the studies includes:

*POLICIES THAT UNDERPIN GOVERNMENT-LED INTERVENTIONS TO SUPPORT SMALLHOLDER FARMERS*: These include acceleration of agricultural diversification (Programme d'accélération de la cadence de l'agriculture sénégalaise (PRACAS) in Senegal) (FAO et al. 2021); policy support to Zero

[2] See for example: https://projectdelivery.gov.uk/teal-book/home/part-a-project-delivery-in-government/chapter-4-governance-and-management/#section-6

Budget Natural Farming (ZBNF) in India (FAO et al. 2021); agricultural development support for smallholder farmers from government in South Africa (Mokgomo et al. 2022). In Ethiopia, the Agricultural Development-Led Industrialisation (ADLI) strategy reinforces and supports the central role of the public sector through Participatory Demonstration and Training Extension System (PADETES), the Farmer Training Centres (FTCs), and Agricultural Technical and Vocational Education and Training (ATVET). These provide agricultural extension, functioning in a decentralised way down to the sub-district level, including supporting farmer-owned institutional structures (committees and associations) at community-level (Gebremariam et al. 2025).

*CLIMATE CHANGE AND RESILIENCE:* For example, mitigation policy in Chile:

> *"The first Chilean Climate Mitigation Plan for Agriculture defines how the sector will contribute to national and international climate goals. The plan establishes measures to keep emissions within the sectoral carbon budget assigned by Chile's Long Term Climate Strategy. The Adaptation Plan for the Forestry and Agricultural sector, which began development in 2020 with the support of the Green Climate Fund, went to public consultation in February 2024." (OECD 2024, 179)*

And updated agriculture policy in Costa Rica:

> *"Public Policy for the Agricultural Sector 2023-32. The policy includes actions oriented to increase the sector's productivity, sustainability, resilience, and adaptation to climate change, to improve the international competitiveness of Costa Rican products, create employment and improve living conditions in rural areas." (OECD 2024, 237)*

*ENABLING FINANCIAL SUPPORT:* A range of policies and regulations in Brazil address climate risk/impact, governing programmes that encompass funds and stipends to cope with droughts (Garantia-safra federal and Bolsa Estiagem) and loans for adapting infrastructure to semiarid conditions (The National Programme to Strengthen Family Farming (PRONAF-2020)), and loans for farmers who adopt low carbon emission practices (ABC Plan) (Marengo et al. 2022). Policy supports credit at preferential rates in Brazil ("*The total credit allocation for commercial agriculture for the 2023/24 harvest was increased by 27% to BRL 364.2 billion ($73.6 billion)*").

*COMPENSATORY PROGRAMMES ADDRESSING INCREASED COSTS OR MARKET DISRUPTION:* Canada launched two programmes to compensate for the effects of trade agreements on supply managed sectors (dairy, eggs, poultry). In early 2024, Indonesia changed the system of fertiliser subsidies in response to current high level of international prices that made the allocated budget insufficient. The budget will be increased by 56% and the price gap subsidy will be transformed into a direct payment to buy fertilisers. Sweden further augmented the tax reduction applied to diesel used in professional agriculture, forestry and aquaculture activities, effectively eliminating diesel taxes for certain farmers (OECD 2024).

*IMPROVING ENVIRONMENTAL SUSTAINABILITY:* In the European Union, the new CAP introduced the so-called enhanced conditionality which integrates elements of cross-compliance and greening from the previous CAP. In response to press reports on high rates of contamination of vegetables by pathogens and pesticide residues, Viet Nam issued a decision to develop "*safe, concentrated vegetable production areas*" (OECD 2024).

*ACTIONS TO REINFORCE SOCIAL SUSTAINABILITY:* Viet Nam has taken steps to encourage the development of agricultural co-operatives to support sustainable development. Funding and advisory services were made available to Māori agribusinesses in New Zealand. The Philippines New Agrarian Emancipation Act writes off credit debt for more than half a million farmers (OECD 2024).

*IMPROVING THE AGRICULTURE KNOWLEDGE AND INNOVATION SYSTEM (AKIS):* Lithuania is developing an on-line tool to estimate farm-level CO2 emissions and absorption, which is intended to be used for emission certification and trading. The National Institute of Innovation and Transfer in Agricultural Technology of Costa Rica introduced a new variety of red bean named Urán, developed in collaboration with the University of Costa Rica (OECD 2024).

*REINFORCING BIOSECURITY, ANIMAL HEALTH AND ANIMAL WELFARE:* Australia increased biosecurity funding with additional investment over four years and a permanent increase from 2027 (OECD 2024).

*SUPPORT TO ORGANIC PRODUCTION:* The Organic Products and Production Act became law in New Zealand. The first national action plan in Malta for organic food covers the years 2023 to 2030 (OECD 2024).

These studies cover a broad range of countries and regions. Two studies are global in nature, covering a wide range of countries on differing income levels (OECD 2024)[3] or OECD countries (Cobourn and Ignaciuk 2025)[4]. The remaining studies encompass seven African countries (Malawi, Tanzania, Zambia, Senegal, Ethiopia, South Africa), India and Brazil.

Groups targeted in the studies are largely smallholder farmers (6 studies). Of these, three also looked at commercial farmers (medium/large), value chain/market actors and/or agribusiness. One specifically included extreme poor, and one considered governance support targeting women.

Notably, all of the above government support examples from the literature are supply-side and externally driven, including agroecology-focused interventions. As a result, governance support may do very little to shift existing biases within earlier /previous policy arrangements, e.g. large-scale capture; monoculture-focused; failures to address underlying gaps in access to finance, data and information, or digi-money credit instruments for small-scale farmers. Plausible change pathways between the repurposing focus and one or more of the desired outcomes therefore need to be adequately described.

## OUTCOMES

In terms of overall impacts covered by the studies, two capture 'triple wins' (climate, nature and people/health), four cover benefits for people and two mention benefits for climate. One study was mostly a discussion of the interventions, including hypothetical interventions, with scant attention to outcomes (Cobourn and Ignaciuk 2025). The OECD study details new agricultural policies that rolled out in 2023-24, so discussion of outcomes here is limited given the policies are so nascent (OECD

[3] This study covers 54 countries total, with standalone chapters for Argentina, Australia, Brazil, Canada, Chile, China, Colombia, Costa Rica, the EU, Iceland, India, Indonesia, Israel, Japan, Kazakhstan, Korea, Mexico, New Zealand, Norway, Philippines, South Africa, Switzerland, Turkey, Ukraine, the UK, the US and Vietnam.

[4] This study covers OECD countries: Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States.

2024). A few country case studies mentioned finance mobilised or policies adopted to work towards agricultural transformation/sustainability.

Benefits for farmers resulting from governance support to sustainable agriculture and JRT through policies, decisions, standards and practices, include improvements in incomes for farmers linked to support. For example, in Brazil, over $4 billion in rural credit given during the 2019/2020 growing season, adoption of low carbon emission agricultural practices, and mainstreaming of agricultural transformation into general adaptation policy/programmes are related to a reduction of social and economic vulnerability and support to the poor smallholder farmers and rural workers (Marengo et al. 2022). Similarly, agricultural development support in South Africa has led to higher production in all types of livestock for farmers receiving assistance compared to those who had not received assistance – although men's production is higher than women's, and not all farmers receiving assistance had higher incomes; in some locations incomes were higher among farmers not receiving assistance. Nonetheless, estimates of the effect of access to the agricultural development support on both food security and the agricultural income of farmers appear significantly positive. A household that receives at least one form of support earns income ranging from approximately R52,000 - R60,000 ($3250 - $3750), on average, more than a household that does not receive any assistance (Mokgomo et al. 2022).

In terms of triple wins, one study notes that the data indicates multiple benefits from the adoption of ZBNF in Andra Pradesh, India, supported by local government agricultural and rural development policy (see **Box 2** for a detailed discussion of triple wins). For example, almost 90% of surveyed farmers reported an increase in yields and a decline in costs, thereby improving livelihoods (FAO et al. 2021). Negative outcomes reported in the studies focus around two key areas framed as a 'misuse' of agricultural policies and linked to elite capture and supporting corruption. First, the use of agricultural policies, particularly those related to subsidies and direct support to farmers, as a means by which governments garner votes. In this case, policy supports measures that act as an indirect source of funds for campaigns and electoral strategies for winning rural votes. This can be viewed by politicians as a quick way of compensating for a lack of longer-term investment in rural infrastructure [Dorward et al. 2009, cited in Mdee et al. 2021]. Second:

> *"It benefits governments to keep the price of food low for noisy and politically active urban populations, whilst also subsidising production for the populous rural voters. Subsidies to agricultural production are frequently subject to local elite capture in their allocation and may limit sustainability of intensification through decreasing cropping diversification, promoting the use of inorganic inputs and ignoring soil fertility in the long term." (Mdee et al. 2021, 1265; citing Jayne and Rashid 2013; Chapoto, Kabaghe, and Zulu-Mbata 2015)*

### ENABLERS

Enablers identified in six of the seven studies for supporting governance for sustainable agriculture and just rural transitions revolve around internal factors such as political will (expressed through the effective establishment, implementation and enforcement of laws and regulations), the role of meso-level institutions as mediators between policy and what is happening on the ground, and (support for) collaboration and cooperation.

Two studies explicitly highlight political will, and the way this is embodied through policy. For example, in Marengo et al. (2022), political will from government translates into relevant programmes/policies for semi-arid areas. In turn, policy is championed at a local level, and resources are given to adapt to environmental challenges, enabling outcomes. This is further supported by creation of coalitions and the finance given to respond to disasters/prepare for future environmental challenges. In the South African context, agricultural policies to address inequalities in access to resources after apartheid demonstrate government commitment to support farmers, underpinned by various policies (Mokgomo et al. 2022). In the same region, to tackle the humanitarian crisis brought on by weather-related shocks in 2015 and 2019, as well as the fiscal constraints caused by the rising cost of imports and interest on debt repayment, the Malawian government has aimed to rationalise public spending. This has led to a fall in budget for agricultural subsidies, creating space for spending on other non-subsidy priorities (FAO et al. 2021).

Other studies mention the key role of meso-level institutions (sub-national agricultural institutions and actors, including extension services, farmer organisations, traders, investors in contract farming, input suppliers and local authorities who control land tenure systems) that act as mediators that determine the extent to which agricultural policies contribute to inclusivity and sustainability, for example for sustainable intensification in agriculture (Mdee et al. 2021). Related to this are the enabling effects of institutional connections:

> *"Successful efforts are often characterised by boundary spanning activities that connect capabilities across hierarchies or among projects. Successful transformation depends on the ability of actors operating at multiple, nested levels to mobilise innovation and transformation processes" (Cobourn and Ignaciuk 2025, 25).*

Effective collaboration and cooperation between agencies working in development activities is key (Cobourn and Ignaciuk 2025; Gebremariam et al. 2025), as is a favourable domestic political context that actively supports this, for example Ethiopia Payment for Ecosystem Servies (PES) framework (Gebremariam et al. 2025).

An external enabler highlighted in one paper relates to the global context and markets, specifically the impact on farmers of reduced global demand and markets for traditional crops driving diversification which reinforces governance efforts. In Senegal, FAO et al. (2021) suggests key drivers behind farmers' diversification efforts were the decline in world demand for groundnuts, a vital product for farmers' incomes and food security, which resulted in significant losses for domestic producers and rising concerns over natural resource degradation, such as soil depletion.

### BARRIERS

Barriers to effective governance support identified in the studies relate mainly to internal factors, with only one study highlighting external factors such as geopolitical events (e.g. the Russo-Ukraine war), natural disasters and trade policy challenges (OECD 2024).

Internal factors that act as barriers revolve around a disjoint between policy and practice – either through lack of consideration of the context (for example, not taking full account of the complexity of gender relations and inclusion (Mdee et al. 2021)) and how things work in practice, as well as availability of resources. This is described in one study as "the policy-practice gap" (Mdee et al. 2021).

This can result in implementation failure. For example, in the case of Ethiopia lack of capacity, effective training or resourcing of extension workers, high staff turnover and low trust among farmers all limited the effectiveness of services (ATVET, PADETES), leading to an over-focusing on production while market conditions were neglected, limited participation of women, and a lack of bottom-up strategies (PADETES) (Gebremariam et al. 2025). Lack of efficient coordination between multiple institutional levels also impacted negatively on information sharing.

Ineffective implementation also arises where there are inconsistencies between global, regional and local policies on land governance and approaches to agriculture development (Mdee et al. 2021). One study frames this in relation to the way policies are formed, specifically the introduction of reactive actions/policies/programmes that occur post-disaster, rather than pre-disaster, noting that some of these constitute maladaptation and are not sustainable (Marengo et al. 2022). In a similar vein, one study highlights barriers due to policies that uphold production practices ill-suited to a changing climate or those that buffer farmers from risk without incentivising transition, which hinder transformation (Cobourn and Ignaciuk 2025). The same study notes institutional barriers can arise from policymaking that favours the status quo. Uncertainty and risk aversion are also significant barriers at individual, collective, and institutional levels, including uncertainty in the regulatory environment (Cobourn and Ignaciuk 2025).

Reasons behind the policy-practice gap discussed are political economy-related (Mdee et al. 2021). These include the creation of policy in vacuums in central government and elite levels alongside the tendencies of government bureaucracy to be hierarchical, the practical politics of power and patronage, and significant resource constraints. The implication of this is that *"smallholder farmers remain trapped in between the politics and dynamics of competing interests,"* along with evidence of elite capture (e.g. land allocations; agricultural subsidy schemes) (Mdee et al. 2021).

### 3.2.2. TARGETED FINANCIAL INCENTIVES

#### OVERVIEW

On targeted financial incentives, the OECD (2024) provides an overview, noting, "*governments have many policies in place intended to encourage farmers to adopt innovations. This includes financing investments, sharing the costs of new practices, encouraging the setup of young farmers, and the use of regulatory incentives*." These policies "*can encourage farmers to adopt practices that promote soil health, biodiversity conservation, and resource efficiency*." Specifically, targeted financial incentives can include subsidies and grants, amongst other tools. This section covers targeted incentives only, in other words incentives that have not be reorientated or reformed – these other interventions are covered in **sections 3.2.4 and 3.2.5**.

Seven studies explore the role of targeted financial incentives in supporting sustainable agriculture. The interventions within this category vary. They include capital subsidies for investments in farming equipment through the EU's CAP (Czubak and Piotr Pawłowski 2020); monetary disbursements through a public works programme called the Malawi Social Action Fund (MASAF) to develop community assets (Ignaciuk et al. 2021); agricultural subsidies for fertiliser, seeds and pesticides through the Farm Input Subsidy Program (FISP), also in Malawi (Chakrabarti et al. 2024); a 'smart subsidy' PES scheme for soil conservation practices, also in Malawi (Ward et al. 2021), subsidies for Total Cost Insurance (TCI) for three major crops in China (Zhifeng Zhang et al. 2022); national

agricultural support and protection subsidies for increased grain productivity, also in China (Kong et al. 2023); and a voucher scheme for fertiliser and improved maize/rice seed through the National Agricultural Input Voucher Scheme (NAIVS) in Tanzania (Jongwoo et al. 2021).

In summary, the targeted financial incentives explored in this review include agricultural input subsidies and vouchers, insurance subsidies, direct payments, and general rural development financial support. Not all of them support sustainable agriculture specifically – some interventions are in the form of conventional agricultural productivity support, including inorganic fertilisers and pesticides.

These interventions cover three countries and one region: China, Malawi, Tanzania, and Central and Eastern Europe (specifically, Czech Republic, Estonia, Lithuania, Latvia, Poland, Slovakia, Slovenia and Hungary). Apart from the study focusing on CAP in Europe, which targets commercial farmers, the other interventions target smallholder farmers. The public works programme in Malawi also targets extreme poor, and the FISP targets women, marginalised groups, people with disabilities, and young/older people.

## OUTCOMES

In terms of the overall impact of these studies, four noted benefits for people, one noted benefits for people and climate, one reported 'triple wins', and one did not note any impacts. There is a disproportionate focus on benefits for people because most of the financial support goes towards increased productivity, leading to greater food security and improved incomes. Sometimes, this leads to negative outcomes in other areas. For example, in China, where a pilot was done on subsidies for TCI, farmers in the selected provinces had improved incomes. However, TCI encouraged farmers to burn straw, thereby emitting harmful gases and leading to negative environmental and health impacts due to increased pollution (Zhifeng Zhang et al. 2022). The agricultural subsidies in China explored in Kong et al. (2023) seemed to lead to increased planting of cash crops and fertiliser application, increasing food production and food security. Likewise, in Chakrabarti et al. (2024), farmers increased their use of inorganic fertiliser and experienced greater crop production. The authors noted, however, that there did not seem to be an increase in crop diversity, farmer incomes, women's empowerment or access to health services.

The study on MASAF in Malawi noted that the policy intervention led to greater adoption of Climate Smart Agriculture (CSA) techniques, greater productivity and welfare benefits (Ignaciuk et al. 2021). The study on NAIVS in Tanzania also reported some positive outcomes, including increased integrated soil fertility managements, leading to improved soil health and greater yields (Jongwoo et al. 2021). The study on CAP in Central and Eastern Europe noted that there was an increase in asset value on farms taking part in the subsidy programme, but it was too early to tell if this would lead to increased productivity or other outcomes (Czubak and Piotr Pawłowski 2020).

The only study to report progress towards 'triple wins' was the smart subsidy PES pilot in Malawi. Under this programme, farmers could voluntarily register and commit to practicing conservation agriculture (CA) in exchange for direct financial compensation. The pilot featured two payment modalities: a conventional subsidy and an agglomeration payment which offered an additional bonus for each neighbouring farmer who also practiced CA, thereby fostering positive network effects and accelerating the spread of soil conservation practices. The results indicate that financial incentives effectively encouraged the adoption of CA. Villages randomly selected for program participation saw adoption rates increase by 10% compared to control villages, and 87% of participants had not

previously practiced CA. The programme seemed to achieved climate and environmental objectives, as it required participants to practice all conservation agricultural practices to be eligible for payment. However, the study does not specify to what degree direct payments increased farmer's income, relative to base levels, nor what the climate mitigation and adaptation outcomes were.

Only one study included an examination of sustainable agriculture outcomes, noting that the adoption of CSA in Malawi led to greater productivity and welfare for smallholder farmers (Ignaciuk et al. 2021). It is interesting to note that two interventions that did not seem to include a sustainable agriculture component – focusing on agricultural inputs for increased productivity – were associated with negative or neutral environmental, health and income outcomes (Zhifeng Zhang et al. 2022; Chakrabarti et al. 2024).

#### ENABLERS

The seven studies covered a wide range of enablers. These include historical context (i.e. previous iterations of the policy), increased funding (through an additional funding window) and the sharing of evidence and tools for skills transfer in the case of MASAF in Malawi; synergies with a social cash transfer programme with FISP; and the targeting of specific, vulnerable households for NAIVS in Tanzania (Ignaciuk et al. 2021; Chakrabarti et al. 2024; Jongwoo et al. 2021). The study on CAP noted that greater economic sustainability on a macro level allowed for greater investment in agricultural subsidies (Czubak and Piotr Pawłowski 2020). Across most of the studies, government was an important enabler, as the government had to drive policy decisions.

#### BARRIERS

Only the study on FISP in Malawi discussed barriers to policy interventions in detail (Chakrabarti et al. 2024). It found that a major barrier to the programme's impact was a corrupted decision-making process for funding allocations across villages. Often, unofficial criteria were used to identify beneficiary households, with farmers' statuses and relationships with village leaders determining who was able to access subsidies. Subsidies often went to already-wealthier, male-headed households, and did not reach those most in need.

### 3.2.3. SUBSIDY REPURPOSING

#### OVERVIEW

Just two studies explicitly cover subsidy repurposing (FAO et al. 2021; Mollers et al. 2022). The first is a global study covering a wide range of countries (88 in total), with case studies of Malawi, Senegal and India. The other focuses on Moldova (impact evaluation). Repurposing is defined in FAO et al. (2021) as the reduction of agricultural producer support measures that are inefficient, unsustainable and/or inequitable, in order to replace them with measures that are the opposite. **This means agricultural producer support is not eliminated but reconfigured**: repurposing does not necessarily signal an about-turn with regards to subsidy policy, but a shift in what it aims to achieve, which may or may not be linked to the 'triple wins'.

In the case of FISP in Malawi, reforms to enhance efficiency have been promoted since 2015/2016, including fixed prices for delivering subsidised fertilisers, increased farmer contribution and involving private sector in importing and selling subsidised fertilisers (FAO et al. 2021). In Senegal, price support

measures and fiscal subsidies on variable inputs and on-farm capital inputs were revamped following the 2007–2008 world food price crisis, when an input subsidy scheme was reintroduced within the framework of the cereal (mainly rice) self-sufficiency policy (Baborska, forthcoming, cited in FAO et al. 2021). Moldovan agricultural policy has undergone a profound shift in instruments toward less distortive measures since 2010. Post-investment subsidies make up the largest share of support in the agricultural sector, while new types of subsidies have been introduced, targeting young farmers, female farmers and migrants: subsidies in advance for start-up projects, (2018); subsidies in advance for improving the standard of living and working conditions in rural areas (2019); and direct payments per head of animal aimed at revitalising the livestock sector (2020) (Mollers et al. 2022).

Groups targeted in both studies are smallholder farmers and women. In addition, the study on Moldova looks at impact on commercial farmers (medium/large), marginalised groups and different age groups (youth/older people), while the global study additionally considers value chain/market actors.

### OUTCOMES

Outcomes in terms of 'triple wins' (climate, nature and people/health) are alluded to in FAO et al. (2021) where fiscal savings from the FISP in Malawi seem to have created space for increased spending on other sectoral investments. The fiscal savings have mainly been redirected towards public goods, such as irrigation, agricultural research and technology transfer, as well as social protection measures, for example in cash-for-work/food programmes. Mollers et al. (2022) focus mainly on 'benefits for people', outlining measurable effects in terms of labour, farm production and economic success.[5] Environment and climate effects were small and statistically insignificant, although the analyses pointed towards a decrease in fertiliser use, positive effects on erosion and environmental protection in general (benefits for nature and climate). The results overall apply to only a small group of beneficiaries. There is an amplification effect for those who had been receiving subsidies for more than one year, suggesting impacts of investment subsidies unfold over longer time periods with repeated 'treatment'.

### ENABLERS

Enablers discussed in the papers encompass external factors such as fall in demand for specific agricultural products driving diversification (such as in Senegal, mentioned in **section 3.2.1** above). Internal political economy factors in Moldova revolve around political commitment and country-led leadership of the reform process, evidenced through the launch of a National Agriculture and Rural Development Strategy (2014- 2020) with several agricultural policy measures offered to support this strategy, which supported the number of farms participating in policy support measures almost doubling between 2013 and 2018 from around 4,000 to more than 7,000 (Mollers et al. 2022).

### BARRIERS

While Mollers et al. (2022) discuss barriers to participation in and effectiveness of subsidies, neither of the studies analyse barriers to subsidy repurposing itself. Barriers to effectiveness of investment subsidies in Moldova include access to loans and financing as a barrier to increasing competitiveness

[5] While investment subsidies were linked to increased workload, labour productivity also increased. Furthermore, beneficiaries of investment subsidies successfully increased their hygiene standards. The yields of crop production were positively affected by subsidies.

and farm development, especially for smaller scale, less commercialised farms that represented most Moldovan farms (Mollers et al. 2022). Only farms with sufficient financial means or access to credit markets can take advantage of the (post-)investment subsidies. Although the subsidy programme targets young farmers, female farmers and return migrants by offering them 15% higher subsidies, these groups remain a minority among the recipients (6% are young farmers, 5% are women). Applicants found the application process onerous. Loan subsidies are also prone to deadweight loss and leverage effects, with a large share of beneficiaries (46%) benefitting from the subsidy even though they would have taken the loan without support.

### Box 3: Studies that explore sustainable agriculture in Ethiopia

Five studies explore sustainable agriculture-related policies in Ethiopia. This box provides a summary of each of the projects.

- Gebremariam et al. (2025) explores the various initiatives the Ethiopian government has rolled out to launch extension programs and facilities in order to support rural development. The study explores the Farmer Training Centres (FTCs) in detail. These are governed by a management committee of between seven and 10 people and include women and youth representatives. The study found that these FTCs were not as effective as possible because they did not have enough trained staff, and there was a lack of coordination across all levels.
- Reardon et al. (2024) contains a case study on Ethiopia's agricultural value chain. Specific interventions include the upgrading of the highway system from the capital to secondary cities; the expansion and upgrading of produce wholesale markets in Addis; the introduction of policies to deregulate supply chains of agricultural products among Ethiopian provinces; and the liberalisation of vegetable seed imports and imports of equipment and pesticides.
- Alemu and Tolossa (2022) explore the effectiveness of Large-Scale Agricultural Investments (LSAI) on improving people's livelihoods. LSAI began operations in 2008, and people hoped that it would create markets and jobs, increase the rate of adoption of harvesting technology and input use, and improve infrastructure. However, the study found that due to weak institutional frameworks, LSAI malpractice and the lack of continuous follow ups caused LSAI policy to fail. The study found that natural, human and financial capitals of houses that used the policy were lower than the control group.
- Oniki et al. (2020) looks at the role of the hillside land distribution program in improving the condition of young, landless farmers. Landless farmers who are permitted to farm on the communal land must abide by certain standards regarding conservation. The study suggested that farmer incomes and efficiency were improved through this programme.
- Mnukwa et al. (2025) explored the role of secure land tenure, both formal and perceived, on fruit tree cultivation in Ethiopia. Since 1975, Ethiopia has had some level of communal land ownership, with the government nationalising all land in 1975. Currently, there is some recognition of land rights, and Ethiopia established a land certification programme in the late 1990s/early 2000s. The study suggests that secure land rights significantly promote fruit tree cultivation, although social factors such as gender and land acquisition method impact these outcomes as well.

It seems that the Ethiopian government, both historically and more recently, has implemented several policy measures relating to land tenure, agricultural production, and rural extension that impact the adoption of sustainable agriculture practices. The outcomes are often not detailed explicitly, but it does seem that a lack of resources and weak institutions created barriers for implementation. However, it seems there has been progress due to policies providing more secure land tenure and improving the agriculture value chain.

### 3.2.4. REFORM OF POLICY/SUPPORT (INCLUDING PILOTS)

#### OVERVIEW

Six studies focused on reforming policies and public support. One study was a cross-cutting report from the FAO which explored various types of reforms, repurposing strategies, and policy and support reorientation through multiple country case studies (FAO et al. 2021). Another study looked at reforms supporting agricultural service enterprises in Ethiopia, Myanmar, Indonesia, and France (Reardon et al. 2024). Four studies were country specific and analysed reforms in Brazil (Paviot et al. 2025; Valencia et al. 2021), China (Fan and Yang 2023), and Kyrgyzstan (Moldokmatov et al. 2025).

In the FAO framework, 'reform' and 'repurpose' are closely linked but distinct concepts. Aligning with the OECD definition, the report defines policy reform as the process in which changes are made to the formal 'rules of the game' – laws, regulations, and institutions - while repurposing refers to a broader, strategic shift in what policies aim to achieve. Using this framing, the report positions reform as a component within repurposing strategies: if repurposing aims to redirect agricultural producer support away from inefficient, unsustainable, or inequitable measures toward those that enhance efficiency, equity, and sustainability, reform focuses on the mechanics of change required, such as amending policies, restructuring institutions, or reallocating fiscal resources. In essence, **reform changes how policies operate, while repurposing changes what they are for**. Within this framework, reforms can be identified at several stages in the development of a repurposing strategy:

i. first-order change: identify the changes required to existing policies (reform and/or removal);
ii. second-order change: identify new policies to be implemented (repurposing);
iii. third-order change: determine the structural and institutional change that is required to generate a paradigm shift for the agriculture sector (institutional arrangements to make repurposing effective).

##### *TYPES OF REFORMS IDENTIFIED*

Across the reviewed studies, a range of reforms to agricultural policies and public support were identified, differing in objectives, mechanisms, and levels of implementation. The reforms often overlapped with other intervention categories, including financial incentives, governance support, and regulations.

Several interventions related to fiscal subsidy reforms, which aimed to improve efficiency, reduce production and market distortion, and/or promote sustainable farming and land-use. **Efficiency-enhancing reforms**, such as the 2015/16 reforms to Malawi's FISP, sought to improve the cost-effectiveness of public subsidies and create fiscal space for broader investments in public sector services (FAO et al. 2021). The FISP reforms included fixed prices for delivering subsidized fertilisers, increased farmer contribution, and the involvement of the private sector in importing and selling subsidized fertilisers (see also Malawi case study in **Box 4**).

The FAO framework also identified **decoupling reforms**, where fiscal subsidies were detached from specific production or input use (FAO et al. 2021). In the EU, reforms to the CAP have led to a sharp rise in decoupled subsidies, which now account for half of the total budget support to farmers. Similar trends are emerging in China, where a rising share of subsidies are being decoupled from production under policy reforms promoting long-term productivity growth.

China has also instituted **structural reforms** to fiscal subsidies. Fan and Yang (2023) examined the 'three subsidies reform' which consolidated multiple existing subsidy streams into a single Agricultural Support and Protection mechanism to promote sustainable practices. Implemented nationwide after a 2015 pilot, the reform encouraged moderate-scale operations and incentivized farmers to adopt soil conservation and input reduction measures (see also China case study).

Additionally, some reforms have **introduced financial incentives** to promote sustainable practices or mitigate income losses from the removal of distorting or unstainable policies. For example, the reform of the Swiss Agricultural Policy (AP 2014–2017), which removed direct payments for intensive livestock farming to meet policy objectives for biodiversity protection, also included transition payments to ease the negative economic impacts on farmers (FAO et al. 2021). Valencia et al. (2021) examined a reform to incentivise sustainable farming practices, exploring how reforming public contracting and procurement can serve as a policy mechanism for both women's empowerment and farm diversification. The study looks at the redesign of Brazil's National School Feeding Program (PNAE), which aimed to link food security, education, and rural development through targeted public food procurement. The reforms included a benchmark to purchase 30% from family farmers within a school's municipality and providing up to a 30% price premium for certified organic and agroecological products.

Finally, some reforms were linked to government efforts to **stimulate market development and access**. Reardon et al. (2024) identified various forms of government support that enabled the growth of outsourced agricultural services in Myanmar, Indonesia, Ethiopia, and France. Outsourced agricultural services are supplied by a range of actors, including medium and large farmers with excess machinery capacity, wholesalers seeking to reduce transaction risks, agro-dealers, and agribusinesses serving out grower networks. Services typically range from mechanised harvesting and fertilisation to drone-based monitoring, allowing farmers to access modern technologies without owning costly assets. These outsourced service enterprises help farmers adapt to domestic and international agrifood value chains by addressing key constraints such as limited access to information, skills, labour, and equipment. The types of government support provided in the study included policy reforms that enabled the provision of specialised farming operations by private micro, small, and medium-sized enterprises (MSMEs), as well as regulations, infrastructure development, and support to research and innovation. The case study which focused primarily on reforms involved the mechanisation and import liberalisation reforms instituted in Myanmar that influenced the rapid expansion of labour-saving technologies for rice farmers through outsourced service providers. In 2012, the government reformed import license provision for agricultural machinery and reformed the banking sector to allow private banks to provide loans to agriculture.

### OUTCOMES

Outcomes of Malawi's efficiency-enhancing reforms were discussed briefly and largely relate to broader subsidy repurposing (**section 3.2.3**). The reforms successfully reduced the FISP budget by $42.6 million, creating fiscal space for increased spending on irrigation, agricultural research and technology transfer, and social protection (FAO et al. 2021). Specific outcomes of decoupling reforms were not discussed in the reviewed studies.

Though the 'three subsidies reform' discussed in Fan and Yang (2023) is presented as one of the Chinese government's efforts to 'adjust its agricultural subsidies with food security in mind to support

the green transformation of agricultural production', the study identifies a series of trade-offs within the outcomes achieved. While the reform aimed to encourage conservation practices, it was associated with an overall increase in fertiliser use, with reductions only observed when linked to expansion of grain area sown. Specifically, the ASR policy was found to increase fertiliser consumption by 5-6% in major grain-producing regions by stimulating higher grain output and on-farm employment. The study recommended stronger environmental conditionality in subsidy eligibility, targeted green payment schemes, and enhanced oversight mechanisms to better align the reform of the agricultural subsidy system with green transformation objectives.

PNAE, Brazil's national school feeding programme, enabled households to transition from input-intensive monocultures to diversified farming systems (e.g., horticulture) and the certification schemes incentivised sustainable practices including reducing or eliminating chemical fertilisers, preserving native forest and biodiversity, and using organic seeds (Valencia et al. 2021). The study also reported outcomes for improved household income through increased market access and enhanced women's economic empowerment as they transitioned from subsistence gardening to holding decision-making roles in market-oriented production.

Importantly, the study showed how the outcomes of the PNAE reform were multifaceted and reinforcing. The public procurement program created positive feedback loops between women's empowerment and crop diversification on farms: "*women were more empowered in households participating in the PNAE, and this empowerment was associated with diversified farming systems. When women had greater levels of participation in farm management decisions, agrobiodiversity and use of agroecological practices were higher*." Furthermore, the programme strengthened coalitions among the government agencies, NGOs, and social movements - such as the Landless Workers' Movement and Peasant Women's Movement - involved in shaping the inclusive nature of the reforms.

The outcomes of the Swiss Agricultural Policy (AP 2014–2017) reforms were estimated at the design stage (FAO et al. 2021). An impact assessment considered expected benefits to various stakeholder groups under four scenarios: (a) business-as-usual; (b) implementation of the AP 2014–2017 proposal; (c) adaptation of the AP 2014–2017 scenario to meet demands from farmers; and (d) adaptation of the AP 2014–2017 scenario to meet demands from conservation groups. The scenario corresponding to the Federal Council's AP 2014–2017 proposal produced the most favourable results across nearly all indicators. Under this scenario, farm incomes would increase by 13%, while livestock would decline by 10%, decreasing pollution from nitrates and phosphate and greenhouse gas (GHG) emissions. Nutrition and food security outcomes were also evaluated, with the assessment concluding that despite a decline in the total number of livestock, the total calories produced would increase by 3% due to higher dairy yields and a shift toward arable farming.

### ENABLERS

Several enabling factors were identified that supported the design, uptake, and effectiveness of agricultural policy reforms. Political leadership and commitment were found to be central in several contexts. In Malawi, government commitment to rationalise public spending in response to fiscal pressures, including interest on debt repayment, and weather-related shocks created an enabling political environment for the reforms to the FISP. Similarly, China's 'three subsidies reform' benefited from strong country-led leadership, beginning with a government-initiated pilot in 2015 that was rapidly scaled up nationwide in 2016 (Fan and Yang 2023). Targeted policy design was also identified

as an enabler. The effects of China's subsidy reform were much higher among farms with lower levels of mechanisation, where precision fertiliser application technologies were less available, suggesting that reforms were more impactful where technology gaps were greatest.

In Brazil, the redesign of PNAE to support family farmers, particularly women, was driven by strong mobilisation from rural social movements and NGOs advocating for agroecology and gender equity (Valencia et al. 2021). These included the Peasant Women's Movement, the Movement of Rural Women, and the Landless Workers' Movement. Their engagement with state institutions, such as the National Council for Food and Nutrition Security helped secure legal and institutional changes that enabled innovations in public procurement. The feedback loops between women's empowerment and crop diversification also amplified participation during implementation. The study found that 65% of PNAE households participated in agroecological social movements, compared to 40% of non-PNAE farmers and households with female farmers participating in agricultural programs led by local NGOs were seven times more likely to be enrolled in PNAE.

The study on Myanmar highlighted market and regional dynamics as important enabling conditions (Reardon et al. 2024). Farmer demand for outsourced mechanisation services was facilitated by growing rice export opportunities and the availability of appropriate equipment in neighbouring markets with similar crops and farm sizes, including China and Thailand.

Drawing on examples from country case studies, the FAO report concludes that effective repurposing typically depends on multiple, well-coordinated reforms across the entire food supply chain, including its links to other sectors such as trade, environment, and energy (FAO et al. 2021). Achieving this requires policy coherence so that reforms in one area do not undermine progress in another and the ability to leverage synergies between sectors.

#### BARRIERS

The reviewed studies did not discuss barriers to reform in-depth. However, Fan and Yang (2023) noted that the voluntary nature of conservation measures and the absence of a monitoring system limited the effectiveness of China's 'three subsidies reform' on reducing fertiliser use. Valencia et al. (2021) identified barriers at the implementation level, where logistical and infrastructural challenges limited participation and access to policy benefits. The study found that despite the inclusive nature of the reform, long distances between farms and food purchasing centres, coupled with inadequate road infrastructure, constrained the ability of smallholders to engage in Brazil's public procurement programme.

### 3.2.5. REORIENTATION OF POLICY/SUPPORT (INCLUDING PILOTS)

#### OVERVIEW

Four studies identified reorientation of agricultural policies and public support instruments, i.e., strategic shifts in what policies aim to achieve. Across the studies reviewed, national or local policy objectives were repositioned toward resilience, diversification, sustainability, or nutrition, rather than solely productivity or staple crop expansion. The studies cover (i) China's pilot policy to treat heavy-metal-contaminated farmland as a driver of agricultural development resilience; (ii) Senegal's PRACAS agenda to diversify production; (iii) multi-country initiatives that mainstream orphan crops and wild

edible species into national policies and public programs; and (iv) Malawi's evolution from the FISP to a broader Affordable Inputs Program (AIP).

Chen and Hu (2023) examined how China's pilot policy for the treatment of heavy metal-contaminated cultivated land (HMCLT) enhances agricultural development resilience (ADR), defined as the agricultural system's ability to 'maintain its original structure, essential functions, and basic services following external interference'. Implementation of the policy pilot began in 2014 and included several measures, adapted to fit land conditions; areas with limited pollution adopted alternative crop planting and fallow methods, while advanced agricultural technologies (e.g., removing chemical materials) were utilised for cultivated land with high levels of pollution.

An FAO study looked at the orientation of policies and spending under the PRACAS agenda in Senegal (FAO et al. 2021). Launched in 2014, PRACAS aimed to diversify production away from groundnuts – which at the time accounted for around 40% of cultivated land and dominated the rural economy – toward rice, fruits, vegetables and cereals. Though input subsidies and price interventions remain a key part of Senegal's agriculture policy, they now target a broader spectrum of agricultural crops. While this may constitute a broader reform or repurposing of the subsidy scheme, it nonetheless represents a reorientation to support diversification and enhance resilience. Additionally, the agenda prioritises public expenditure toward extension, training, roads and irrigation.

Borelli et al. (2020) looked at government efforts to mainstream affordable and climate-resilient orphan crops and wild edible species to support local food system transformation. The seven countries included in the study (Brazil, Kenya, Guatemala, India, Mali, Sri Lanka, Turkey) pursued strategies that (i) increased evidence of the nutritional value and biocultural importance of these foods, (ii) strengthened links between research and policy to ensure they were mainstreamed in national food and nutrition security policy frameworks, and (iii) increased awareness of these foods among consumers to promote their incorporation in diets and markets.

Finally, Walls et al. (2023) looked at the evolution of Malawi's FISP (2005-2020) and transition to the AIP in 2020. Reorientation involved transitioning long-standing input support from a maize-focused, targeted subsidy toward broader crop coverage (including sorghum and rice) with more universal eligibility for smallholder farmers.

### OUTCOMES

Chen and Hu (2023) reported that the HMCLT pilot policy achieved its anticipated outcomes, with the average metal reduction rate reaching 60% across the pilot area. The study also reported implementation measures have contributed to ADR and improved coordination between agricultural production and ecological conservation within the pilot zones.

FAO et al. (2021) reported that subsidy reorientation in Senegal led to fiscal savings and supported diversification by expanding priority commodities included under the subsidy. The horticultural sector expanded rapidly from 2014-2024, with Senegal moving into the production of niche products such as tomatoes, butternut squash, peppers and sweet potatoes, which have become major export products, especially for European markets.

In Malawi, national and global assessments have recognised the FISP as having a positive impact on national food security, transforming Malawi from food insecure to a net food exporter (Walls et al. 2023). However, results on household nutrition and dietary diversity were mixed. The study found

community-level perspectives on FISP outcomes were divided: village chiefs tended to highlight higher maize output, increased incomes, and legume promotion, whereas other community members emphasised persistent low agricultural output, limited affordability of diverse foods, and shortages of agricultural labour. Additionally, several district-council and civil-society respondents perceived gendered impacts, as female farmers gained income from legume cultivation but often remained excluded from broader farm decision-making and financial control. The study does not examine the outcomes of the AIP programme.

#### BARRIERS

Common barriers included weak implementation capacity and insufficient coordination between stakeholders. In China, policy effects were constrained by the incoherent management strategies and government guidance, particularly as implementation requires coordination between cities and regions (Chen and Hu 2023). In Malawi, weak targeting mechanisms and elite capture reduced intended outcomes (Walls et al. 2023). In the seven countries in Borelli et al. (2020), market and standards constraints limited the commercialisation of diversified crops, with smallholders facing difficulties meeting formal procurement requirements.

#### ENABLERS

Key enabling factors for reorientation of agricultural policy objectives toward resilience, diversification and nutrition included embedding these objectives within national strategies and legal instruments.

### 3.2.6. REGULATIONS

#### OVERVIEW

According to the OECD, regulations "*can encourage the adoption of sustainable practices and technologies to achieve specific environmental goals. They include environmental regulations, land use regulation, water resource management, and food safety standards. Regulations are part of an overall policy package to guide the innovation into the direction of both environmental sustainability and productivity growt*h" (OECD 2024).

This review found six studies that discuss regulations in the area of sustainable agriculture. Many of the studies explored regulations as one of several policy interventions. Studies covered topics including the regulation of pesticide use in Uganda (Tambo et al. 2024); regulations through CAP in the EU (OECD 2023); land-use regulation in OECD countries (OECD 2025); government support to enable outsourced agricultural services in Myanmar, Ethiopia, Indonesia and France (Reardon et al. 2024); and some other case studies on regulations in the wider context of worldwide sustainable agricultural policy (FAO 2024; OECD 2024).

Only the study on pesticide regulation in Uganda focused on a specific context and intervention. The other studies were more general. The study on pesticide regulation assessed the role of agro-dealer certification in improving knowledge and practices related to environmentally-friendly pest control in Uganda (Tambo et al. 2024). To qualify as an agro-dealer in the country, sellers must have completed 11 years of formal education, pass a certification training course, and register with the Ministry of Agriculture, Animal Industry and Fisheries. They also must renew their licenses to trade pesticides

every year and register with other government agencies. The Department of Crop Inspection and Certification conducts periodic market surveillance to make sure that sellers remain compliant.

The study on outsourced agricultural services explores the implementation of these measures in Myanmar, Ethiopia, Indonesia and France (Reardon et al. 2024). In Myanmar, interventions include the exemption of import control on agricultural machinery, the introduction of transferable land rights that made it easier for farmers to get loans on agricultural machinery, and the reform of the banking sector to allow private banks to provide loans to agriculture. In Ethiopia, the study covers the deregulation of supply chains of agricultural products among Ethiopian provinces and the liberalisation of vegetable seed imports and imports of equipment and pesticides. In Indonesia, they looked at the government's expansion and upgrading of the produce wholesale markets and the creation of the Indonesian Tropical Fruits Research Institute, which helped breed the initial introduction of new mango varieties. In France, the authors explored the EU and the government's role on the demand side via sustainable agricultural regulations.

The six studies covered a wide range of countries, especially the two FAO studies, which had a global focus. There are more specific case studies on Uganda, Myanmar, Ethiopia, Indonesia, France, Malawi, Tanzania and Zambia. The groups targeted by these regulatory policies range from smallholder farmer level to large agribusinesses. None of the studies commented in detail on the inclusion of women, youth/older people or other marginalised groups in these regulatory measures.

### OUTCOMES

The studies did not go into significant detail on the outcomes of regulation. The OECD notes that only a few countries have reported regulations that focus on improved environmental sustainability in agriculture (OECD 2024). Specific outcomes from the studies include increased knowledge and reduced greenhouse gas emissions. The regulation of pesticides in Uganda led to greater knowledge on integrated pest management and biopesticides (Tambo et al. 2024). The study on CAP suggested that there has been a partial decoupling of greenhouse gases from production levels – although this outcome is not entirely attributable to regulation as CAP includes many different interventions (OECD 2023). The study on land-use policies in OECD countries found that framework regulations, and zoning policies in particular, had the highest mitigation effect (OECD 2025). The authors found that framework regulations mitigated, on average, 47 $tCO_2eq$ per hectare each year.

### ENABLERS

Several of the studies covered enablers, more generally towards sustainable agricultural practice, and specifically towards regulation that supports sustainable agriculture. The enablers were context specific but can be categorised as increased knowledge/education; availability of farming equipment and other inputs; improvement of infrastructure; the participation of farmers in policymaking; and government will.

In the study on the agro-dealer certifications for pesticide use in Uganda, the authors found that the education level and number of years of experience of agro-dealers was correlated with their likelihood of being certified (Tambo et al. 2024). The study also found that the decentralisation of certification training courses fostered increased participation as the training became more accessible to people in rural areas.

The study on outsourced agricultural services included substantial discussion on enablers (Reardon et al. 2024). In Myanmar, they found that interventions were enabled by the increased availability of farming equipment in neighbouring markets (China and Thailand) that was made for similar crops and agrarian conditions. As prices for farming equipment fell and the number of retailers grew, farmers were able to take further advantage of the import control exemptions on these machines. These interventions were also enabled by greater demand for eco-labelled vegetables from European customers, which prompted the development of this agricultural sector.

In Ethiopia and Indonesia, the construction and upgrading of highways from secondary cities to the capital cities supported the development of fruit and vegetable supply chains (Reardon et al. 2024). The growth of the mango industry in Indonesia was also supported by research on new varieties done at the Indonesian Tropical Fruits Research Institute. While not directly related to regulation, these enabling factors allow regulation supporting sustainable agriculture to be enacted more broadly and effectively. In France, the study notes that a stable enabling environment, including hard and soft infrastructure and regulations facilitating business formation and intellectual property rights, supports the implementation of agricultural regulations created through the EU or the government.

Lastly, studies covering sustainable agriculture more generally, including regulations, noted that enabling factors include participation of farmers in policymaking, the use of evidence to support agricultural policy, and political will from governments to transform agricultural systems (FAO 2024; OECD 2024).

### BARRIERS

Many of the barriers discussed were more general and not specifically related to regulation. The Uganda case study, however, did include specific barriers to the regulation of pesticide (Tambo et al. 2024). These included a lack of awareness from agro-dealers about the need to get certified; the high costs (250,000 UGX, or $70) associated with getting certified; and the delays from regulatory authorities in completing registrations due to limited resources. 20% of non-certified agro-dealers noted that lack of awareness and high costs were reasons for not getting certified, and 16% said that delays were the main reason.

Other studies noted factors such as lack of incentives to address GHG emissions in agriculture; economic barriers; lack of data, reporting and evaluation; high administrative burdens; and trade policy challenges (FAO 2024; OECD 2024; 2023).

**Box 4: Studies that explore sustainable agriculture in Malawi**

Seven studies identified interventions in Malawi; four focused specifically on Malawi and three were global or regional studies.

- Ignaciuk et al. (2021) examine the interactions between participation in the MASAF and CSA practices. The study found that participation in MASAF was associated with higher CSA adoption, as income earned through the programme helped reduce the budget and risk constraints that make CSA adoption less feasible for asset-poor farming households.
- Ward et al. (2021) assess a 'smart-subsidy' payments-for-ecosystem-services pilot supporting conservation agriculture in southern Malawi, where farmers committed to practising conservation agriculture in exchange for direct financial payments. Two payment modalities were tested: a standard subsidy and an agglomeration bonus encouraging neighbour participation. The programme significantly increased adoption rates: – participating villages saw a 10% increase

compared to controls, and 87% of participants were first-time adopters. The study finds that financial incentives can accelerate uptake and that network-based payments helped spread practices. The programme was enabled by the participation of 'The National Smallholder Farmers' Association of Malawi and the Department of Land Resources Conservation, who led registration efforts and engaged with smallholder farmers to help them choose the best payment modality.

- FAO et al. (2021) explores reforms to Malawi's FISP implemented from 2015/16, aimed at improving efficiency and creating fiscal space. Reforms included fixed delivery prices, increased farmer contributions, and a greater role for the private sector in importing and distributing fertiliser. FISP historically accounted for around 60% of the agriculture budget and 8% of total government expenditure (2005–2017). In 2017 the budget was halved to 27% of agricultural spending, freeing resources for investments in irrigation, research, technology transfer, and social protection. While targeting challenges persisted, the reform illustrates efforts to shift support toward public-good investments alongside input support.
- Walls et al. (2023) provide a political-economy perspective on Malawi's transition from FISP (2005–2020) to the AIP from 2020. FISP primarily supported maize and improved seeds, with legumes added in 2008, while AIP expanded to additional crops and moved toward broader coverage for smallholders. The study highlights the influence of ideas, interests, and political dynamics on programme design and implementation, including issues around targeting and the significant share of agricultural spending devoted to subsidies. There were several barriers to this transition, including different perspectives on the narrative of the policy, with many members of the international coalition promoting action on child stunting/nutrition and members of the national coalition focused on food security and hunger. Different views on the root causes of food and nutrition insecurity, and of the best way to tackle these challenges complicated the development of effective solutions.
- Mdee et al. (2021) places Malawi in a regional perspective and notes that input subsidies, particularly focused on maize, remain central to agricultural policy due to their political importance and perceived link between maize availability and food security. The study finds that this focus can limit diversification and sustainable intensification, with elite capture and election-cycle incentives influencing subsidy spending. It also notes incomplete decentralisation and under-resourced local agricultural support, which can constrain broader systemic transformation. Other barriers to transformation were inconsistencies between global, regional and local policies on land governance and agricultural development; competing interests in the agricultural sector; the creation of policy in an elite bubble; hierarchical tendencies in government; politics of patronage; and resource limitations.
- Broader climate adaptation literature in Africa discussed the need for multi-objective strategies, but did not provide Malawi-specific program evidence (Chiawo and Otiende 2021).

Malawi's experience shows a long-standing reliance on subsidies as the core agricultural policy instrument. Evidence suggests such subsidies can increase staple production and improve welfare for recipient households, although benefits vary and are often concentrated among better-positioned farmers. Recent reforms demonstrate government efforts to enhance efficiency and reallocate part of the subsidy budget toward public goods. Complementary pilots show that performance-based payments can effectively support conservation agriculture adoption, particularly when social network incentives are included. At the same time, the political-economy literature and nutrition-policy case study emphasise long-running implementation constraints and resistance to reform. Maize-dominant narratives and institutional challenges have often constrained policy evolution and slowed diversification and transitions to more climate-smart practices. Across the studies reviewed, government support in Malawi illustrates both the potential of incentive instruments to accelerate sustainable practice adoption and the importance of cross-cutting reform to ensure durable, system-wide benefits.

### 3.2.7. OTHER MEASURES BY GOVERNMENT

Some intervention types had slightly less coverage than the ones covered above. This section provides a summary of relevant themes across other measures to support sustainable, just and resilient agricultural systems. These interventions include extension services; infrastructure; certification and labelling; trade measures; tax reform; and land tenure, rights and redistribution.

#### EXTENSION SERVICES

Eight studies mention extension services and training in relation to policies for sustainable agriculture, although few include specific details about the interventions, outcomes, enablers and barriers. Some notable interventions provide evidence, nevertheless, about the role of extension services and training policies in promoting sustainable agriculture and transforming agricultural systems. These include the extension services provided through the Extension and Advisory Service Program (PNATER) in the semi-arid regions of Brazil (Valerio et al. 2024); technical assistance and rural extension provided by the Dom Hélder Câmara Project (PDHC II), also in the Brazilian semiarid region (Delgrossi et al. 2024); extension programs and facilities provided by the Ethiopian government to foster services and support rural development (Gebremariam et al. 2025); extension services that promote CSA in Sub-Saharan Africa (Mnukwa et al. 2025); and the training of farmers as part of the Brazilian government's Sustainable Production in Areas Already Converted for Agricultural Use (the ABC Cerrado Project) (da Silva e Souza et al. 2021). Three studies briefly mention extension services but do not go into detail (Chiawo and Otiende 2021; van Asseldonk et al. 2023; Mokgomo et al. 2022).

The two projects in the semi-arid region of Brazil and the Ethiopian extension services programme included a gender component. Extension services provided through PNATER had a quota for women's participation, and the study found that this led to women's empowerment (Valerio et al. 2024). The authors found that "*integrating a gender awareness education component in implementing interventions is a powerful tool to change women's status*." The other Brazilian project, PDHC II, aimed to reduce poverty levels and inequalities in the region, while also supporting sustainable agricultural production (Delgrossi et al. 2024). The project also follows the principles of PNATER, adopting its gender equality principles. The study found that, as a result of this project, participants had higher incomes (10 to 49% higher than control groups). The Ethiopian government's support for rural extension includes Farmer Training Centres (FTCs), which are governed by a management committee of between seven and 10 people, including a representative from the women's association and the youth association (Gebremariam et al. 2025). This study did not go into detail on the outcomes of these FTCs.

The other two studies looked more generally at extension services and training. The study exploring the role of extension services in promoting the use of CSA in Sub-Saharan Africa found that they were important (Mnukwa et al. 2025). The authors found that extension services were a critical determinant in CSA adoption, with farmers who had access to these services being 2.8 times more likely to adopt CSA practices. The study on the ABC Cerrado Project found positive outcomes in terms of the adoption of sustainable agricultural practices and GHG emissions reductions (da Silva e Souza et al. 2021). The project aims to promote the adoption of selected sustainable, low-carbon agricultural practices by small and medium-sized agricultural producers in the Cerrado. It is part of the broader Brazilian government's Sectorial Plan for Mitigation and Adaptation to Climate Change for the Consolidation of a Low Carbon Economy in Agriculture (ABC Plan) and included a pilot training and technical assistance

program to reduce the technological knowledge gap of these farmers. The Project trained 7,800 rural producers and benefited more than 18,000 people, recovered 93,800 hectares of pasture areas, and offered more than 214,000 hours of technical and managerial assistance.

Some studies offer insight into the enablers and barriers of these sorts of projects. The study on PDHC II in Brazil found that the PNATER policies that the government established in 2010 supported their project in terms of promoting the provision of TA for rural development, the use of participatory methodologies, and gender equity. The ABC Cerrado Project was enabled by the commitments Brazil had made on the global stage, including at COP15 and COP21 (da Silva e Souza et al. 2021). According to the studies, barriers to extension services include resource scarcity (for example, budget cuts) (Delgrossi et al. 2024); staff shortages for training; and lack of coordination (Gebremariam et al. 2025). The Ethiopian study found that most FTCs were not adequately staffed, and that trainers did not receive sufficient training through the Agricultural Technical and Vocational Education and Training provided by the government (Gebremariam et al. 2025).

These studies suggest that many governments are realising the importance of extension services and are building this into policy to support rural development and the adoption of sustainable agriculture, while also supporting gender equality. There are still many barriers to the success of these interventions, including resource scarcity and lack of training. However, it seems that participatory methodologies and global commitments to mitigation/adaptation may enable the implementation of these interventions.

### INFRASTRUCTURE INVESTMENT

Government support to infrastructure was highlighted in six studies. Investments in infrastructure were often linked with other interventions, including targeted financial incentives (subsidies, grants), regulations, and governance support.

IFAD (2023) was an evaluation of the Rural Clustering and Transformation Project (RCTP), implemented by the Ministry of Agriculture, Forestry and Water Management of Montenegro from 2017 to 2023. The RCTP's main objective was to increase the participation of poor smallholders in inclusive, profitable and environmentally sustainable value chains. While component 1 focused on creating inclusive value chain clusters of producers, businesses and suppliers, component 2 consisted of investing in cluster-supportive rural infrastructure. The infrastructure component financed rural water supply and road improvements through co-financed public calls, using an objective ranking system based on technical feasibility, return on investment, and inclusivity (youth, women beneficiaries). Investments included rainwater harvesting ponds, gravity-fed conveyance networks, and rural roads with erosion protection and drainage for climate resilience. The evaluation found infrastructure beneficiaries experienced a 23-26% increase in gross income compared to control households. Positive results were also reported in terms of sustainability. Municipalities mobilised resources to ensure maintenance of the road and water infrastructure, and in some instances water infrastructure had been effectively managed, operated and maintained by the users themselves with technical support from Municipalities. Additionally, municipalities and national-level stakeholders have been coordinating to formalise mechanisms to scale up project interventions.

As discussed above in the section on targeted incentives, Ignaciuk et al. (2021) assessed the interactions between participation in Malawi's largest public works programme, the MASAF and CSA practices. The study found that participation in MASAF was associated with higher CSA adoption, as

income earned through the programme helped reduce the budget and risk constraints that make CSA adoption less feasible for asset-poor farming households. The study also identified several control variables influencing CSA adoption, including access to infrastructure, for example, distance to the nearest paved road and distance from the nearest weekly agricultural markets and auctions, and community characteristics, for example, the presence of irrigation schemes. In addition to generating income for participants, the programme also helped address these barriers, as employment schemes were focused on developing community assets, including all season roads, soil conservation and drainage, and irrigation infrastructure.

In Kyrgyzstan, qualitative evidence highlighted infrastructure and irrigation development as key outcomes of soft credit and tax-incentive programmes. Farmers reported that investment in irrigation networks through credit schemes improved soil fertility and promoted stable sectoral growth (Moldokmatov et al. 2025).

Across the studies reviewed, infrastructure was also routinely highlighted across studies as a key enabler and persistent constraint to sustainable agricultural transitions. For example, in Ethiopia and Indonesia, the expansion of outsourced agricultural services and high-value horticultural supply chains was facilitated by highway upgrades connecting production areas and secondary cities to major urban markets (Reardon et al. 2024).

Two systemic reviews also highlighted infrastructure as an enabler, and noted its role in climate adaptation. Mnukwa et al. (2025) assessed the institutional, policy and structural factors influencing the adoption and impact of CSA practices in Sub-Saharan Africa. The study found infrastructure played a fundamental role in adoption patterns, including proximity to paved roads increasing adoption rates by 40% and access to storage raising post-harvest practice adoption by 50%. Cobourn and Ignaciuk (2025), an OECD systematic literature review exploring examples of agricultural transformation in response to climate change, listed infrastructure and technological (INT) adaptations as one of four main categories of adaptation. This encompassed investments in crop and livestock technology, for example, infrastructure to reduce livestock heat stress, investments in irrigation and drainage, and efforts to improve regional water infrastructure and management. INT adaptations accounted for approximately 12% of studies in the dataset and most frequently involved improvements to crop and livestock production technologies and irrigation infrastructure. Opportunities for innovation included the application of digital technologies in production systems. Within the irrigation and drainage subcategory, many studies proposed the expansion of irrigated areas as a technical approach to enhance long-term climate resilience.

### CERTIFICATION AND LABELLING

Three studies focused on government support to certification schemes.

In China, the Ministry of Agriculture and Rural Affairs has implemented the Famous, Excellent, Special and New (FESN) agricultural certification policy since 2013 as part of its broader poverty reduction and rural industrialisation agenda (Duan et al. 2024). The policy aimed to promote locally characteristic agricultural products by granting certification to those meeting specified criteria, including production scale, market reach, regional distinctiveness, and nutritional quality characteristics. The certification allowed producers to use an official FESN mark on packaging, signalling verified quality and regional authenticity. Government support extended beyond certification issuance. It included logistical and marketing assistance, advertising campaigns, and preferential access to public procurement

programmes. The study found that FESN certification substantially improved market access and economic growth in poor counties. Certified producers benefited from premium pricing, expanded employment opportunities, and enhanced recognition of local brands. Environmental co-benefits were also noted, as certification required compliance with higher environmental and product safety standards, indirectly improving air and water quality. However, while certification spurred agricultural growth, there was limited evidence of spillover into secondary or tertiary industries, suggesting a need for broader value chain integration.

Furthermore, Angom et al. (2021) explored the national, state and district policies and programme interventions supporting climate change adaptation and mitigation in an Indian District in Gujarat State. In the agricultural sector, this included the government's National Project on Organic Farming (NPOF) programme, which catalysed the creation of state-level agencies such as the Gujarat Organic Products Certification Agency (GOPCA). GOPCA's operations aim to support compliance with NPOF criteria and include providing low-cost inspection and certification services to smallholder farmers. The study does not include a substantial discussion of outcomes; however, it does highlight a list of barriers that have limited policy effectiveness. This includes slow information flows, lack of political will and corruption, and inadequate funding.

Finally, van Asseldonk et al. (2023) examined how policy incentives can serve as mechanisms for enhancing adoption and upscaling of potential CSA practices by small-scale farmers in low-income countries. The study looked at the role of several interventions, including certification and labelling. Based on a meta-analysis from 180 field studies, positive effects on prices and farmers' income from the sale of certified produce were identified. However, no significant evidence was found that total household income improves with certification, and little to no benefits for wage workers were registered. The study concluded that voluntary labels may support CSA adoption, particularly if premium prices are applied and technical assistance is provided.

### TRADE MEASURES

Very few studies in the review focus on trade measures to support sustainable agriculture and just rural transitions, with only three studies mentioning trade measures and agreements, or programmes to counteract negative effects of trading arrangements. One OECD study, for example, mentions Canada's launch of two programmes to compensate for the effects of trade agreements on supply managed sectors (dairy, eggs, poultry) (OECD 2024).

Boafo et al. (2025) explore how international donors have established themselves as highly influential actors in shaping Ghana's agricultural policies, leveraging their financial and technical support to influence policy processes and outcomes through direct involvement in policy-making and broader investments in the agricultural sector. Trade liberalisation, private sector investment and commercialisation were the core objectives and dominant narratives in a number of agriculture policy documents (Food and Agriculture Sector Development Project (FASDEP), Seed Policy, Fertiliser Policy) reviewed in the study. Ghana's public expenditure on agriculture remains one of the lowest in Africa, while the agriculture sector is the highest recipient of donor funding. The sector is therefore especially affected by donor investors and subject to their competing interests. Policy processes and decision-making are generally top–down, with outcomes that marginalise civil society, pro-farmer, and other grassroots groups from policy-making processes. While development partners and donors tend to support market liberalisation, tax reductions and incentives for the private sector and large-scale

farmers, the study suggests that civil society and farmer groups support policies that will protect smallholder farmers from market distortions.

Outsourced agricultural services including international trade services are reported in Reardon et al. (2024) as being important for increasing farm productivity. This is through their effects on the reallocation of rural production factors and increasing the access of farmers to new labour-saving and productivity enhancing technologies. Facilitation or intermediate services in international trade help support farmer capacity to participate in agricultural value chains (AVCs) for high value products, for example fruit and vegetables. The evidence in this study shows that outsourced agricultural services have helped farmers adapt to and participate in international and domestic AVCs in various phases of the Product Cycle.

### TAX REFORM

Six studies include tax reform to support farmers. For example, OECD (2024) describes how Sweden has increased support to farmers by further reducing tax applied to diesel used in professional agriculture, forestry and aquaculture activities, effectively eliminating diesel taxes for certain farmers. However, there is no evidence presented on outcomes in this study as the policies mentioned were rolled out only in 2023/2024. The primary challenge in the Brazilian tax system affecting the agrifood sector is described in Paviot et al. (2025) as being the excessive variation in tax rates for different products, leading to high compliance costs and resource allocation distortions. The indirect tax system also does not allow full crediting of tax paid on inputs, disadvantaging longer value chains and favouring vertical integration. The Brazilian tax reform, approved in December 2023 and January 2025, addresses these issues by unifying several taxes into a dual VAT system with a unified tax base, destination-based collection, and prohibition on new tax benefits. This reform simplifies the tax structure, reduces discrepancies in tax rates, and introduces three tax rate levels (full, reduced, and zero), along with an excise tax on harmful products. Many agrifood products are included in the zero or reduced-rate lists. No evidence is presented on outcomes of reform.

In response to severe food security vulnerabilities due to heavy reliance on food imports, the Kyrgyz Republic took urgent systemic measures to support the domestic agricultural sector (Moldokmatov et al. 2025). An important step was the announcement of a tax moratorium for agricultural land (2022-2024) and a targeted program of preferential lending to domestic farmers (soft credit). Its aim was to improve the financial stability of farmers and, importantly, increase the productivity of the agricultural sector of the domestic economy. For example, tax incentives and loans facilitated the acquisition and renewal of farming equipment, including tractors, combines, and harvesters. The report suggests that this is also supporting sustainable practices: using government loan and tax incentive programs, peasants and rural farmers try to switch to optimal farming methods, as well as organic fertilisers, alfalfa sowing, and crop rotation.

The Chinese government's rural tax-and-fees reform (RTFR) implemented in the early 21st century meant that by the end of 2005, the agricultural tax, which had lasted for more than 2,000 years in Chinese society, was officially suspended (Zhang et al. 2022). This marks a fundamental change in the relationship between urban and rural areas as well as agricultural production in China (Chen, 2009). By the end of 2006, the reform directly alleviated the tax-and-fees burden on farmers by about 160 billion Yuan, with a per-capita reduction of about 170 Yuan. By effectively reducing pressure on farmers' land this has helped to increase the productive investment and cultivated operating area of

farm households, in turn raising agricultural income and dramatically improving wellbeing of rural populations. The study highlights an unintended consequence of this move towards a more progressive tax system:

> *"However, it is also observed that the abolition of agricultural taxes objectively exacerbated the fiscal pressure on local governments, causing them to turn to distort energy prices to cover fiscal deficits and further worsen energy efficiency" (Zhang et al. 2022, 3)*

Nonetheless the study points to a significant abatement effect on agricultural carbon emissions due to the implementation of RTFR:

> *"the implementation of RTFR has a significant improvement on agricultural carbon performance, resulting in an average reduction of 6.35% in agricultural carbon intensity and an increase of 6.14% in agricultural carbon efficiency." (Zhang et al. 2022, 18)*

### LAND TENURE, RIGHTS AND REDISTRIBUTION

Five studies include evidence on policies for improving land tenure, affording land rights to populations or redistributing land and how they affect sustainable agriculture. One of the studies looks at land tenure globally, and the other four focus on Sub-Saharan Africa or specific African countries (specifically, Ethiopia and South Africa).

The study on the role of land tenure in farmer adoption of CSA, which is global in focus, provides some useful information about the importance of land rights in promoting CSA (van Asseldonk et al. 2023). The study notes:

> *"Registration of land rights is commonly used as a procedure for strengthening land administration, reinforcing land ownership feelings and reducing risk perceptions amongst smallholder farmers. Land rights are considered of critical importance to support the process of sustainable land use intensification, dedicating resources to improved land and water management practices and in-depth investments in assets for land conservation. With increased land tenure, rural households become more resilient to climate shocks and investment portfolios are better tailored toward CSA adaptation and mitigation strategies" (van Asseldonk et al. 2023, 6).*

Mnukwa et al. (2025) supports this statement, noting that in Sub-Saharan Africa land tenure emerged as a crucial determinant of CSA adoption. The authors note that, "*farmers with secure land rights are 60% more likely to invest in soil conservation practices and 45% more likely to adopt agroforestry systems compared to those without secure tenure*."

Two studies explore policy around land tenure and land redistribution in Ethiopia specifically (Wolde 2025; Oniki et al. 2020). Wolde (2025) explores the role of secure land tenure, measured through both formal and perceived land rights, on fruit tree cultivation. In 1975, Ethiopia nationalised all rural land and redistributed it to rural dwellers through Peasant Associations. When the Derg regime fell in 1991, the new government created a new constitution, reaffirming state ownership of land but also recognising land rights (including the right to inherit, lease and transfer land). The government

launched a land certification programme in the 1990s and 2000s that "*incorporates GIS technology and cadastral mapping to generate certificates that include geo-referenced maps of land parcels*." The study found that secure land rights significantly promote fruit tree cultivation. It noted, however, that cultivation was also dependent on other factors, including local land use, gender and land acquisition methods. The other study on Ethiopian land reform explored the outcomes of the hillside land programmes that aimed to redistribute land to young, landless farmers. The recipients of allocated communal land can earn money from their agricultural activities, but they must abide by village standards, which include land conservation goals. The study suggests that this programme may have improved incomes and efficiency of farms.

The study on land restitution/redistribution policy in South Africa explored the impact of land tenure on water, energy and food insecurity (Ngarava 2023). The study looked at various land distribution policies in South Africa, including the Proactive Land Acquisition Strategy, Land Redistribution for Agricultural Development and The Settlement/Land Acquisition Grant. The findings were mixed, as beneficiaries of land reform seemed to have improved water security, but continued to be food and energy insecure. The study notes that these outcomes are also influenced by access to social grants and soup kitchens, education levels, employment, household size, gender, and main source of income.

Across these five studies, it does seem that secure land tenure plays a role in promoting the adoption of sustainable agricultural practices. However, outcomes are always tied to other factors and other interventions.

## 3.3. POLICY AND ADVOCACY FOR AGROECOLOGY AND FOOD SOVEREIGNTY

This section sets out the findings from the third phase of purposive hand searches intended to go some way towards filling the evidence gap for policy and advocacy undertaken by non-state actors (NSAs) and Communities of Practice (CoP). NSAs and CoP work on agroecology and food sovereignty are key areas to consider when evidencing the shifting of policy and of agricultural systems towards achieving the 'triple wins'.

Agroecology applies ecological principles to agriculture, "*ensuring a regenerative use of natural resources and ecosystem services while also addressing the need for socially equitable food systems within which people can exercise choice over what they eat and how and where it is produced*."[6] A transdisciplinary field, it embraces multiple scientific disciplines, a set of practices and a social movement to address problems in agriculture and food systems. It focuses on working in a reflective and iterative way in partnership with multiple stakeholders, crucially drawing on their local knowledge and cultural values.[7]

### OVERVIEW

According to a 2019 report from the High-Level Panel of Experts on Food Security and Nutrition of the Committee on Whole Food Security:

> *"There is no definitive set of practices that could be labelled as agroecological, nor clear, consensual boundaries between what is agroecological and what is not. On*

[6] HLPE. 2019. Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition. A report by the High-Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome.
[7] See also: See https://www.fao.org/about/meetings/second-international-agroecology-symposium/en/;

> *the contrary, agricultural practices can be classified along a spectrum and qualified as more or less agroecological, depending on the extent to which agroecological principles are locally applied. In practice this comes down to the extent to which: (i) they rely on ecological processes as opposed to purchased inputs; (ii) they are equitable, environmentally friendly, locally adapted and controlled; and (iii) they adopt a systems approach embracing management of interactions among components, rather than focusing only on specific technologies." (HLPE 2019, 14).*

**We therefore consider policy and advocacy activities as the 'interventions' that support agricultural practices that embody these summary principles**.[8]

Work done by NSAs and CoP tends to largely be through agroecology, food sovereignty and related networks and consortia, with their own policy targets relevant to the repurposing of agricultural subsidies (for the most part indirectly). While NSA and social movement engagement tends to sit outside of formal institutions (while looking for a way into formal arrangements), there is also engagement with national actors, including ministries, particularly in food systems dialogues.

## OUTCOMES

There is a widespread body of evidence making a compelling case for agroecology for sustainable agriculture and a just rural transition that delivers impact towards 'triple wins'. For example, see the Agroecology Fund/Stats4SD Catalogue of Evidence-Based Cases for Agroecology, the agroecology series from the Oakland Institute, Amplifying Stories of Agroecology Practices and Principles Project from The Stockholm Environment Institute, among others.[9]

A recent review by Faure and others provides evidence that agroecology delivers measurable socio-economic and productivity benefits while maintaining or enhancing environmental performance.[10] A review of 80 studies[11] shows that agroecological practices are more frequently associated with positive socio-economic outcomes than conventional management, particularly in terms of income gains linked to productivity and efficiency improvements. Although a portion of findings is neutral, these results still indicate that agroecological systems can match conventional systems socio-economically while generating broader ecological and wellbeing benefits. Meta-analysis of financial profitability of diversified farming further supports these conclusions: diversified production systems promoted under agroecology require higher labour inputs and therefore costs, but generate higher gross income, resulting in overall farm profit levels comparable to simplified (monocrop) farming systems (Sánchez et al. 2022)[12].

The main activities that underpin agroecology are crop diversification, legume-based rotations, agroforestry, and crop–livestock integration. The extent to which these enable productivity and resilience outcomes and support transitions toward more sustainable farming, however, depends on context. In terms of agronomic performance and environmental impacts, agroecological systems

[8] For a comprehensive set of principles see: Agroecology Europe (2021) The 13 principles of Agroecology, link.
[9] See also: Guy Faure, Matthias Geck, Maria-Luisa Paracchini and Nadine Andrieu (2024) What agroecology brings to food security and ecosystem services: a review of scientific evidence, DeSIRA LIFT, link.
[10] Guy Faure, Matthias Geck, Maria-Luisa Paracchini and Nadine Andrieu (2024) What agroecology brings to food security and ecosystem services: a review of scientific evidence, DeSIRA LIFT, link.
[11] Mouratiadou J., Wezel A., Kamilia K., Marchetti A., Paracchini M.L., Bàrberi P. (2024) The socio-economic performance of agroecology, A review. Agronomy for Sustainable Development Vol. 44:19, link (referenced in Faure et al 2024).
[12] Andrea C. Sánchez, Hannah N. Kamau, Francesca Grazioli, Sarah K. Jones, (2022) Financial profitability of diversified farming systems: A global meta-analysis, Ecological Economics, Volume 201 November 2022, 107595, link (Accessed 10th November 2025).

generally maintain or increase yields relative to monocropping systems while using ecological processes, biodiversity management, and nutrient recycling. These systems can operate with or without inorganic fertilisers, though yield gains are typically greatest in low-yield contexts and situations where nutrient management is optimised. Agroecology enhances system resilience through improvements in key ecosystem services such as carbon sequestration, water regulation, and pollination.

A special issue of *Rooted in Agroecology and Food Sovereignty* magazine, from The Centre for Agroecology and Food Security at Coventry University, contains a set of articles on agroecology policies for healthy and just food systems in a range of countries, supported by successful policy and advocacy by NSAs and CoPs. As well as exploring what the policies are trying to achieve, the articles consider the processes that led to their creation, the main drivers and key advocates, constraints including structural challenges, and the potential for agroecology policy. The studies describe how sustained and organised grassroots pressure resulted in the development of national policy for agroecology in their countries, highlighting how food system actors, for example, farmers, researchers, activists and policymakers, help to shape policy creation and implementation to enable agroecology.[13]

Examples include:

- **SENEGAL:** Civil society groups created DyTAES (Dynamique pour une Transition Agroécologique au Sénégal), a platform for multi-stakeholder dialogue where actors working towards agroecological transition can pool their knowledge for more effective advocacy. Ongoing communication with ministries shows promising signs of change in official discourse and formulation of public policies and national programmes. For example, the 'Emerging Senegal' environmental plan and the national strategy for food sovereignty (2016). At the legislative level, a recent land decree supports the securing of collective land, and the introduction of a subsidy scheme for organic inputs is linked to dialogue and potential collaboration between DyTAES and the Ministry of Agriculture.
- **KENYA:** Farmers, civil society (including multiple stakeholder groups along the food system value chain), and government actors, have worked together in coalition to champion the development of the agroecology policy framework in Murang'a county. The collaboration has been institutionalised through the creation of the Murang'a Agroecology Multi-Stakeholder Platform.
- **BRAZIL:** Brazil's national agroecology movement successfully orchestrated an ambitious 10-month decentralised advocacy campaign in May 2021, resulting in the drafting of ten municipal agroecology policies, plans or similar legal instruments. This laid the groundwork for an effective campaign around the 2022 state and federal elections to get candidates at federal and state levels to sign a letter of commitment towards agroecology policies. In the resulting elections, more than 10% of the elected candidates had signed a commitment to strengthening agroecology.
- **ZIMBABWE:** In 2022, small-scale farmers practicing agroecology *"actively participated in the policy development process, advocating for holistic, nature-friendly and people-centred approaches to sustainability and the provision of guidance, resources and incentives for farmers to facilitate the switch to agroecology. As a result, the promotion of agroecology,*

[13] Rooted in Agroecology and Food Sovereignty (2024) Policies for Agroecology, link.

*sustainable livelihoods and ecosystems and climate smart agriculture became fundamental pillars within the government's National Agriculture Policy Framework*".[14] This culminated in the Agroecology Promotion Policy and Strategy published in 2024. Cooperative dialogue between small-scale farmers and national government officials continues to influence national agroecology policy, with ongoing education, mobilisation and engagement with the government.

- **COLOMBIA:** Years of mobilisation and advocacy by a powerful alliance of peasant, Indigenous, Afro-descendent, youth and women's organisations have started to bear fruit in terms of the establishment of a dialogue table between the Ministry of Agriculture and Rural Development and the organisations that have historically championed agroecology and food sovereignty. This is underpinned by proposals for a national public policy on agroecology; alignment of different sectoral proposals within the agroecology framework; and the creation of a regional agenda that can influence national policies.

For the resulting *policies* to be *effective* in driving food systems change, they must recognise indigenous wisdom and rights and local knowledge and be based on solutions that can be enacted by community members. At scale, coherent enabling policies are essential, including strengthened advisory systems, improved access to bio-inputs and finance, development of differentiated markets and fair value chains, and the rebalancing of public support away from intensive monocropping models toward diversified, ecologically grounded systems. These policy and innovation systems are central to unlocking agroecology's potential to address food security, climate change, and biodiversity loss (Faure et al 2024).

## ENABLERS

> *"One of the most important takeaways in this collection of experiences and perspectives is that without exception, action for transformative policy change at all levels – local, national and global – has been catalysed by strategic, broad-based, bottom-up movements of peasants, Indigenous Peoples and civil society actors."* [15]

Key factors enabling strategic policy engagement by agroecological actors include:

- Multistakeholder **partnerships:** Building broad alliances and coalitions with other actors outside food production (e.g. Kenya).
- Leveraging synergies: Finding and leveraging synergy with existing government policies, priorities and agendas, including mitigating climate change, improving public health and poverty alleviation (e.g. Kenya).
- Political economy: A conscious and proactive policy environment, which is also indispensable for fostering a transformation to agroecology[16]. The existence or establishment of supporting declarations, agreements and legal frameworks adopted in regional and international fora.
- Timing: newly elected governments often ran with an agroecology agenda – but the foundations had usually been laid over many years. (e.g. Brazil and Colombia, among others).

[14] Rooted in Agroecology and Food Sovereignty (2024) Policies for Agroecology, page 38, link.
[15] Rooted in Agroecology and Food Sovereignty (2024) Policies for Agroecology, link.
[16] Consortium for Agroecological Transformation (2025) A Compendium of Enabling Policies for Mainstreaming Agroecology: Policy Guide, link.

- Informal policies**:** Developed by communities and cultures based on a shared set of values.

### BARRIERS

Barriers identified include:

- Dependence on international partners (both technical and financial) risks power asymmetries if partners impose their own visions and priorities; neutral stance of international organisations may hamper joint advocacy to address systemic injustice (e.g. Senegal).
- Over-reliance on micro-projects hampers system-wide change (e.g. Senegal).
- Holistic long-term vision needed for agroecology hampered by lack of inter-ministerial coordination frameworks (e.g. Senegal).
- Limited capacity given the scale of some countries to extend the reach of advocacy work, e.g. In the case of ANA in Brazil "*to reach more significant segments of the population with our proposals and to influence election outcomes more robustly*".
- Limited resources to expand reach across territories to influence more policymakers and parliamentarians (e.g. Brazil): "*Large gatherings and the movement of teams across different territories, for example, are strategies that could enhance the reach of the agroecological movement and strengthen popular mobilisation in defence of its proposals. Considering the size of Brazil, however, these activities are prohibitively expensive."*
- Budget constraints that contribute towards lack of personnel within civil society organisations, upon whom political advocacy relies (e.g. Brazil).

# 4. SYNTHESIS AND CONCLUSIONS

## 4.1. SUMMARY OF EVIDENCE FOR TRIPLE WINS

Drawing on literature on approaches for agricultural subsidy repurposing and overall sustainable agricultural policy reform, this RER provides a picture of what evidence exists to support the JRTSP ToC, including evidence for 'triple wins' and for 'Just' outcomes.

**'Triple wins'** result from agricultural policy reform 'interventions', including subsidy repurposing, that simultaneously deliver benefits for **people (livelihoods and nutrition), climate (mitigation and adaptation), and nature (ecosystem protection and restoration)**. While evidence across outcomes is often difficult to isolate, specific programmes provide documented proof of success, in at least two if not all three of the dimensions.

### ENABLERS: WHAT DRIVES SUCCESS?

Achieving 'triple win' outcomes is typically supported by a mix of political, institutional, and social factors:

- **NATIONAL LEADERSHIP AND ALIGNMENT WITH GOVERNMENT PRIORITIES:** Strong country-led commitment, as seen in China's subsidy reforms and Malawi's response to fiscal pressures, is essential for driving large-scale change.
- **BOTTOM-UP SOCIAL MOVEMENTS:** Success in countries like Brazil, Senegal and Colombia was driven by **grassroots pressure** from peasant and indigenous organisations that forced agroecology onto national agendas.

- **MESO-LEVEL INSTITUTIONS:** Local actors, such as extension services, farmer organisations, and community-level committees, act as vital mediators that determine how well national policies translate to inclusivity on the ground.
- **SECURE LAND TENURE:** Farmers with secure land rights are significantly more likely to invest in long-term conservation, such as agroforestry (45% more likely) and soil health (60% more likely) (Mnukwa et al. 2025).
- **INFRASTRUCTURE AND TECHNOLOGY:** Proximity to paved roads can increase adoption of climate-smart practices by 40%. Similarly, digital tools and improved irrigation are key structural enablers.

### BARRIERS: WHAT PREVENTS FULL POTENTIAL?

Despite the potential for triple wins, several systemic barriers often lead to implementation failure:

- **THE POLICY-PRACTICE GAP:** Centrally designed policies often fail because they ignore local contexts or the complexity of **gender relations**. This is compounded by a lack of trained extension staff and high staff turnover.
- **ELITE CAPTURE AND PATRONAGE:** Agricultural subsidies are frequently used by governments to garner votes or are captured by **wealthier, male-headed households** through informal relationships with village leaders.
- **ADMINISTRATIVE AND FINANCIAL EXCLUSION:** Onerous application processes for grants or certifications often exclude smallholders. Further, often only farmers with existing credit or other financial resources can take advantage of investment subsidies.
- **POWER ASYMMETRIES:** Over-reliance on international partners can lead to external visions and priorities being imposed on local communities, sometimes hampering joint advocacy for Just transitions.
- **REACTIVE POLICY MAKING:** Programmes that are reactive (e.g. post-disaster) rather than proactive can lead to **maladaptation** and unsustainable long-term outcomes.

## 4.2. EFFECTIVE AND JUST APPROACHES BENEFITING CLIMATE, PEOPLE AND NATURE

Evidence for interventions that are **just, equitable, and inclusive** points towards those that explicitly target vulnerable groups, such as smallholder farmers, women, and the extreme poor, to ensure that the transition to sustainable agriculture does not leave marginalised populations behind. Not surprisingly, 'Just' approaches tackle inclusivity head-on through socially-focused interventions, from design through to implementation, notably through:

### 1. EMPOWERING WOMEN AND MARGINALISED GROUPS

Interventions are most inclusive when they move beyond productivity to address social hierarchies. For example:

- Targeted procurement: In Brazil, the redesign of the National School Feeding Programme (PNAE) created a "feedback loop" where women's empowerment was directly associated with higher agrobiodiversity and the use of agroecological practices.
- Financial inclusion: In Malawi, the Farm Input Subsidy Programme (FISP) specifically targeted women and people with disabilities, while public works programmes like the Malawi Social Action Fund (MASAF) helped the extreme poor by reducing budget constraints for adopting climate-smart practices.

### 2. JUST RURAL TRANSITIONS VIA LAND TENURE

**Secure land tenure** is a fundamental driver of equity. In Ethiopia, land redistribution programmes targeting young, landless farmers for communal hillside farming improved both incomes and conservation efficiency.

### 3. GRASSROOTS ADVOCACY AND AGROECOLOGY

Agroecology as a transdisciplinary approach addresses the need for socially equitable food systems:

- Bottom-up pressure: In countries like Zimbabwe, Senegal and Colombia, sustained pressure from peasant and indigenous organisations led to the development of national policies that recognise local knowledge and rights.
- Institutional alliances: In Kenya, the creation of multi-stakeholder platforms has institutionalised the inclusion of various food system actors in policy frameworks.

**Box 5: Gender Equality, Disability, and Social Inclusion principles**

In order to institute effective and just approaches for agricultural subsidy repurposing and sustainable agricultural policy reform, Gender Equality, Disability, and Social Inclusion (GEDSI) principles must be included. As explored above in section 4.1, power asymmetries are a significant barrier towards 'triple wins' in sustainable agricultural reform. Acknowledging these power differentials and creating specific mitigation measures is a key part of building sustainable agricultural interventions.

In order to have interventions that are just, equitable, and inclusive (those that address the needs of vulnerable groups) it is essential to consider the gender, disability and social inclusion dimensions of each intervention. Examples of the importance of the inclusion of GEDSI considerations include the PNATER and PDHC II programmes in Brazil. The first incorporated quotas for women's participation in extension services, and the other had explicit poverty mitigation objectives. An outcome of the PNATER programme was greater women's empowerment, and the PDHC II programme led to improved incomes for the smallholder farmers.

**Enablers and barriers to equity**

To ensure interventions remain just and inclusive, the sources identify critical factors that either support or hinder progress. Barriers echo those that hinder Triple Wins. Critical Enablers for 'Just' outcomes include:

- **Political support from national government:** for example, expressed through the enforcement of regulations that protect smallholders and promote gender equity.
- **Participatory methodologies:** Engaging farmers directly in policymaking ensures solutions are locally adapted.
- **Synergy with social protection:** Linking agricultural subsidies with social cash transfers (as seen in Malawi) helps reach the most vulnerable people.

**Table 2: Summary of evidence for interventions delivering 'Just' outcomes**

| Intervention Category | Examples and Evidence of Inclusivity/Equity |
|---|---|
| **Financial Incentives & Repurposing** | **Zero Budget Natural Farming (ZBNF)** in India improved livelihoods and elevated the status of women. **Subsidy repurposing** in Moldova specifically targeted young farmers, female farmers and migrants. |

| | |
|---|---|
| **Governance & Policy Reform** | **Brazil's PNAE (School Feeding Programme)** redesigned procurement to purchase from family farmers, directly empowering women in decision-making roles. |
| **Extension Services** | Programmes in **Brazil (PNATER, PDHC II)** and **Ethiopia (FTCs)** used quotas or committees to ensure women and youth participation, leading to increased empowerment and income. |
| **Infrastructure Investment** | **Montenegro's RCTP** used a ranking system for infrastructure projects that prioritised benefits for youth and women. |
| **Land Tenure & Rights** | Secure land rights in **Ethiopia** and across **Sub-Saharan Africa** enabled smallholders to invest in long-term sustainability, such as fruit tree cultivation and agroforestry. |

## 4.3. EVIDENCE GAPS

The RER reveals several gaps in evidence for achieving 'triple wins' – simultaneous benefits for people, climate, and nature – through agricultural policy reform. These gaps matter because without understanding the mechanisms, political economy conditions, and equity dimensions of successful reform, it is impossible to design interventions that reliably deliver 'triple wins' at scale.

**Shallow outcome analysis.** Even where studies nominally address triple wins, the analysis is predominantly high-level. Only four studies provided meaningful triple win evidence, and none delved into specific outcomes across all three dimensions, making it difficult to attribute impact to particular interventions.

**Limited subsidy repurposing evidence.** Just two studies explicitly covered subsidy repurposing, and neither analysed barriers to repurposing itself. Critically, no studies on subsidy repurposing in Africa or Latin America and the Caribbean made it through our inclusion criteria – regions central to JRTSP – leaving a major geographical blind spot.

**Weak coverage of process and mechanisms.** The review initially found almost no evidence on policy advocacy by NSAs and CoP, key drivers of systemic change. Similarly, evidence on reform champions, leverage effects, timeframes for change, and changing norms is extremely thin (zero to three studies each). These process-oriented factors are critical to understanding *how* just rural transitions happen, not merely *whether* outcomes occur. Though subsequent additions to the review helped to address this, resources for the exercise were limited so gaps remain.

**Gaps in equity and inclusion evidence.** Very little evidence exists on policy reform and subsidy repurposing outcomes for indigenous peoples or people with disabilities (two studies each), groups whose inclusion is fundamental to "just" transitions.

**Integration and replication gaps.** Evidence on integration of repurposed subsidies into broader policy frameworks (three studies) and replication of successful policy action across countries (4 studies) remains sparse, limiting understanding of how reforms scale.

### POTENTIAL NEXT STEPS

**Evidence gaps for further investigation include:**

- The political economy of subsidy repurposing in Sub-Saharan Africa and Latin America, including winners, losers, and reform pathways.

- Long-term triple win outcomes from agroecological transitions, particularly in LMIC contexts where interventions are maturing.
- How NSA advocacy and social movements translate into durable policy change.
- Equity outcomes for women, indigenous peoples and people with disabilities under agricultural policy reform.
- Mechanisms and timeframes through which repurposed subsidies become integrated into mainstream policy and contribute towards triple-wins.

**Potential strategies for uncovering evidence and updating the evidence review:**

- **Ongoing political economy analysis** of specific subsidy repurposing (and/or other related policy reform) successes/experiences, including winners, losers and reform pathways (contextual factors, barriers and enablers), building on the Baseline *Context and Preliminary Political Economy Analysis.*
- **Realist and process-tracing approaches in evaluation** could better capture the mechanisms and conditions under which reform succeeds, moving beyond outcome measurement to explain *why* change happens.
- **Targeted grey literature and organisational report reviews**, particularly from NSA networks, agroecology coalitions, and country-level programme documentation, which hold much of the NSA advocacy evidence that falls outside academic search frames.
- **Primary qualitative research (through monitoring and evaluation activities)** with reform champions, farmer organisations, and civil society actors in JRTSP priority countries to surface contextual knowledge unavailable in published literature.
- **Longitudinal and 'legacy'-style case studies** tracking policy reforms over sufficient timeframes to observe triple win outcomes unfold, a recognised limitation of the current evidence base.

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# ANNEX 1: RER RESEARCH PROTOCOL

## OBJECTIVES AND SCOPE OF THE EVIDENCE REVIEW EXERCISE

The rapid evidence review will **synthesise evidence and contribute towards learning on approaches for agricultural subsidy repurposing and overall sustainable agricultural policy reform**. The exercise will be used to review and test the JRTSP Theory of Change (ToC), identifying gaps where evidence is weakest for further/deeper exploration during evaluations.

Our prime concern is not to document effectiveness of specific agriculture interventions, a rich and growing literature already exists[17], but to identify effective interventions **specifically for agricultural subsidy repurposing, as well as wider agricultural policy reform** to:

- drive investment into sustainable agriculture practices that deliver 'triple wins';
- help farmers build resilience
- support governments in repurposing agricultural subsidies and generally promoting and mainstreaming sustainable agriculture across various policy instruments;
- build resilient agriculture systems
- support sustainable agriculture transition;
- contribute towards a just rural transition.

**A *just rural transition* refers to inclusive and equitable efforts to transform food systems, resulting in a global food system that works better for people, nature and the climate**

We will do this through exploring the repurposing of agricultural subsidies and other policy options and what is known about their effectiveness in different contexts. Agricultural policy reform options/interventions/repurposing of agricultural subsidies will include regulations and encompass: targeting, incentive creation; market creation; subsidy reform; land (reform) policy; access to other productive resources (labour, capital).

We propose producing outputs in two-stages:

**Stage 1:** Evidence "bubble" map to show **what evidence there is** (September 2025);

**Stage 2:** Rapid evidence review to show **what the evidence says** i.e. analysis of the nature and strength of evidence pathways (September-October 2025).

This will be complemented by a separate, conventional literature review of evidence from the global north, presented as a reference table/matrix. The focus (depth and breadth) will be discussed with FCDO based on the output of the RER.

## REVIEW QUESTIONS

Both the evidence gap map and rapid evidence review will be driven by clear, overarching review questions that define the overall scope of the exercise.

[17] Reviews undertaken recently by Agulhas include: Sam Greene and other, *Rapid Umbrella Review: Effectiveness of climate change adaptation interventions in low- and middle-income countries* [to be published soon]; Gemma Norrington-Davies and others, Interventions to reduce deforestation, encourage sustainable farming, and enhance farmer welfare in and around moist tropical forest. A rapid evidence assessment, 2024, link.

*EVIDENCE GAP QUESTION:*

Is there evidence for [*different agricultural subsidy repurposing and policy reform options*], and the conditions under which these are effective [*e.g. political economy dimensions/contextual factors/enablers & barriers]*, to support opportunities for farmers [*including smallholder and marginalised farmers, e.g., women, indigenous peoples, and the rural poor*] to adopt sustainable, resilient, and climate sensitive agricultural practices?

*RAPID EVIDENCE REVIEW QUESTION:*

What does the evidence tell us about the effectiveness of different agricultural subsidy repurposing and policy reform options in supporting opportunities for and adoption of sustainable, resilient, and climate sensitive agricultural practices, contributing towards a just rural transition? By and for whom?

## REVIEW APPROACH

Overall, the evidence review takes the following steps:

**Stage 1:**

1. Develop Framework:
    a. Define sets of dimensions/themes and search terms
    b. Develop extraction matrix
    c. Search methods for the identification of relevant literature and evidence
    d. Inclusion and exclusion criteria (PICOS)
2. Title and abstract screening
3. Landscape mapping data extraction
4. Analysis: evidence gap 'bubble' map

**Stage 2:**

5. Quality appraisal
6. Full data extraction on included studies
7. Analysis and synthesis: evidence review

The RER approach will be based on the principles of a systematic evidence review, tailoring it to allow a policy-relevant synthesis of the evidence base over a relatively short timeframe. Inclusion and exclusion criteria are informed by the Population, Intervention, Comparison, Outcome and Study (PICO) model to allow a focus on how, for whom, and under what circumstances policies can be effective.

The review will: a) map and identify the current landscape of policies, regulations, interventions and incentives (including repurposing of agricultural subsidies, access to finance) to support farmers to adopt sustainable agriculture practices; b) explore the extent to which these policies, regulations, interventions and incentives/subsidies are supporting a transition towards more sustainable agriculture practices, and c) identify gaps in the literature and potential priorities for the evaluation, future policy development and JRTSP/Official Development Assistance (ODA) programming.

## REVIEW FRAMEWORK

The main themes (framework dimensions) suggested for the rapid evidence review align with the JRTSP ToC [18], focusing on evidence for the outcomes resulting from agricultural policy reform interventions and agricultural subsidy repurposing strategies, as well as the nature of subsidy repurposing and policy reform interventions that successfully contribute towards sustainable agriculture transition. This will allow a comprehensive mapping of key evidence documents that can be filtered by various dimensions relevant to the programme and its TOC. Data will be extracted into the analysis (data extraction) template from the included studies for the listed themes.

| **Policies interventions/tools/instruments to support sustainable agriculture reform (including pilots)** | |
|---|---|
| Reform of support<br>– *includes pilots* | e.g. **Subsidy reform** (i.e. input subsidies e.g. fertiliser, production payments/output subsidies and market price support; consumer subsidy) |
| Reorientation of support<br>– *includes pilots* | e.g. **Subsidy repurposing** (e.g. subsidies are repurposed to promote sustainable practices across sector boundaries in the given context (e.g. agroecology, avoid deforestation, reforms support land use policies at the frontier between forested/agricultural areas, health, environment)) |
| Targeted financial and other incentives (subsidies, grants) | e.g. Support to incentivise sustainable (low emission, climate resilient, nature positive) agriculture practices; Support to incentives for sustainable land use; Support to incentives for Markets/Private Sector; conservation payments |
| Other measures by government to support sustainable, just and resilient agricultural systems | Provided by government including R&D and innovation support; Education and Training Programmes; Sustainable Certification Extension Services; Infrastructure and digitalisation |
| Regulations | e.g. Regulations controlling direct producer input subsidies; Policy and regulations controlling indirect subsidies etc |
| Governance support | Provided by government including Strategies; Institutional Structures; Stakeholder Engagement; Monitoring and Evaluation; Agricultural Knowledge and Innovation Systems (AKIS) development |
| Impact | |
| 'Triple wins' | Delivers benefits for Climate, Nature AND People/Health |
| Benefits for Climate | e.g. carbon sequestration, emission reduction |
| Benefits for Nature | e.g. restoration of ecosystems and biodiversity |
| Benefits for People | Improved livelihoods, nutrition and health benefits; Poverty Alleviation benefits |
| Outcome Areas | |
| Farmer adoption of sustainable, resilient, and climate sensitive agricultural practices | Farmers across diverse cultural, gendered, and agroecological contexts adopt sustainable, resilient, and climate-sensitive agricultural practices |
| Sustainable and inclusive agricultural policies adopted | Evidence for government adoption of sustainable and inclusive agricultural policies that support sustainable, resilient, and climate sensitive agricultural practices |
| Integration of repurposed subsidies | Repurposed subsidies integrated into sustainable and inclusive agricultural policy implementation |
| Replication of policy action | e.g. wider groups of countries replicate policy action |
| Policy Reform Pilot roll-out | e.g. rolled out sub/nationwide |

[18] Revised in June 2025

| | |
|---|---|
| Uptake of evidence | Evidence and lessons learned on implementing policy reform/opportunities for sustainable agricultural taken up (Outcome) |
| Experiences documented and/or shared | Output: Evidence and lessons learned generated, documented and shared on implementing policy reform/opportunities for sustainable agricultural transformation |
| Coalitions built | e.g. between countries; communities of practice; NSA – especially in relation to major events (Outcome: International coalition of high ambition countries built to lead a just transition to sustainable agriculture |
| Compliance and oversight mechanisms to enforce repurposed, sustainable (and inclusive) agricultural policies and subsidies | Outcome: Compliance and oversight mechanisms strengthened to enforce repurposed, sustainable agricultural policies and subsidies |
| Mainstreaming of ag transformation | Outcome: Sustainable agricultural transformation mainstreamed and agricultural subsidies repurposed |
| Policy advocacy undertaken by NSA nodes/Community of Practice | Nb. Output |
| Finance leveraged/mobilised | e.g. public, private finance; Outcome: Additional finance mobilised (e.g. IBRD) |
| For whom? Especially: effect of subsidy repurposing on actors and markets, winners/losers | |
| Smallholder farmers | |
| Commercial farmers (medium/large) | |
| Agribusiness | |
| Value chain/market actors | |
| Consumers | |
| Women | |
| Extreme poor | |
| Marginalised groups | |
| People with disabilities | |
| Indigenous people | |
| Men | |
| Age groups (youth, older people) | |
| Study focus – crosscutting | |
| Political economy analysis | Studies that specifically focus on PE of ag policy reform; winners/losers |
| GESI/Inclusion/Impact on vulnerable groups | Also: third sector/rural community/indigenous people/farmers voice (including smallholder/family farmers, women and youth) |
| Evidence for key contributors in the TOC | |
| Political commitment | National government-demonstrated commitment, relates also to political cycles and leadership |
| Demonstration effect | e.g. from pilots, success in other contexts |
| Country-led leadership of Reform Process | Country-led (domestic government etc types of actor/activity) |
| Other actor leadership of Reform Process | Supported by International actors (types of actors, types of activities) |
| Timeframes | Sufficient timeframes to support timely and effective reform process |

| | |
|---|---|
| Historic context | e.g. Features of domestic agriculture sector rooted in historic policies, advocacy, relationships that impact present-day |
| Other supporting reforms | e.g. land reform; sustainable forest and land use management |
| External global factors | e.g. global crises and shocks (e.g. conflict); economic factors (e.g. global commodity market volatility, price instability, trade and market access challenges, debt, fiscal tightening; climate and weather extremes, global finance and investment patterns, IP and tech access, global policy and institutional asymmetry) |
| Resources for policy reform | e.g. resources in place for policy implementation and enforcement; finance leveraged |
| Enablers of Farmer uptake | e.g. mechanisms specifically designed to include smallholder farmers; farmer receptiveness; farmer access to resources; trust; buy-in; education; knowledge sharing. |
| Barriers to Farmer uptake | Market and value chain barriers and distortions e.g. power asymmetries, lack of infrastructure, restriction on crop choice/reduced diversity of crops, sudden surplus/scarcity, crowding out of private input suppliers, reduced competitiveness and diversity of the market offer (see also negatives of enablers), economic and financial barriers e.g. high upfront costs, lack of credit and insurance access; knowledge and capacity barriers e.g. limited extension; policy and institutional barriers; sociocultural and behavioural e.g. gender norms, cultural influences. |
| Enablers of policy reform | Other enablers, not already captured including conditions on which the intervention depends e.g. political economy (see Annex I Glossary of terms); power; contextual factors; policy coherence; private sector leverage; market effects and systems; other elements of enabling environment; resources in place for policy implementation and enforcement etc] |
| Barriers to policy reform | Other barriers, not already captured e.g. political economy; contextual factors, lack of policy coherence (see also negatives of enablers) etc] |

## SEARCH METHODS

The search strategy will include bibliographic databases as well as institutional websites and publication catalogues. Searches will include academic articles published in journals as well as grey literature, encompassing studies and reviews, evaluation reports, technical reports, policy and programme documents, working papers, pre-prints and discussion papers, fact sheets, speeches and statements, conference proceedings, news articles and blogs available on the websites of selected institutions[19]. Any duplication of literature will be screened out.

The following bibliographic databases will be searched (title/abstract/keyword):

- Scopus
- Web of Science
- EBSCO

The following evaluation, institutional and programme websites and databases will also be hand searched for relevant grey literature, with some snowballing.

[19] Grey literature that does not contain enough information to conduct a quality appraisal, such as briefs or presentations will be excluded.

- 3ie development evidence portal https://developmentevidence.3ieimpact.org/ and 3ie database of systematic reviews https://www.3ieimpact.org/evidence-hub/publications/systematic-reviews
- Evidence for Policy and Practice Information and Coordinating (EPPI) Centre systematic reviews database
- Campbell Collaboration database https://www.campbellcollaboration.org/evidence/
- OECD, including Agricultural policy monitoring and evaluation
- Databases of bilateral agencies (including FCDO)
- JRT website (Meridian) https://justruraltransition.org/
- SNV Netherlands: https://www.snv.org
- TechnoServe: https://www.technoserve.org
- United Nations Rome-Based Agencies (FAO, IFAD, WFP)
- World Health Organisation Repository
- World Bank https://openknowledge-worldbank-org.uea.idm.oclc.org/home
- GCF https://www.greenclimate.fund/publications/documents and open data library
- IFPRI https://www.ifpri.org/publications/
- CGIAR https://www.cgiar.org/
- Regional Development Banks

Due to budget and time limitations, we will search academic databases in English.

### INCLUSION AND EXCLUSION CRITERIA (PICOS)

The landscape of relevant studies will be identified and screened systematically in Stage 1 of the RER through a title and abstract screening (June 2025). An agreed PICOS framework will guide screening. Comparators are not generally relevant for this review due to the small 'n' nature of policy reform. The landscape of available evidence will be reviewed to refine the focus of the more detailed research, using an evidence gap 'bubble' map, before carrying out full text screening against the PICOS (Stage 2).

**PARTICIPANTS/POPULATION:** Global – High, low and middle-income countries (World Bank classification), with emphasis on LMICs where possible, keeping in mind the relatively small evidence base. Includes both single country/context and multiple country/context studies. Particular interest in Brazil, Indonesia, Philippines, and Colombia.

We consider also '*who benefits from policy reform?*' E.g. different scales of intervention (household, regional, national, etc.), types of target groups (smallholder farmers, women, the poorest groups, the most marginalised, etc.)

**INTERVENTION(S):** A wide range of policies and regulations (see Table 1) will be considered as long as they are aimed at supporting sustainable agricultural practice (and/or just rural transitions).

**COMPARATORS(S)/CONTROL:** N/A – due to small 'n' nature of policy/regulatory reform

*Main outcome(s):* We will examine the effects of policy and policy reform on: (i) Farmer resilience and driving investment into sustainable agriculture practices (ii) achievement of climate benefits; nature benefits; benefits to people – together ('triple wins') and separately; (iii) sustainable agriculture transition/just rural transitions.

**STUDY DESIGNS:** The RER will include both quantitative and qualitative studies as well as mixed methods designs, with priority placed on primary studies. Reviews, systematic reviews and evidence gap maps will also be included and used to trace evidence back to the primary sources. Studies that fail to adequately describe the methodology will be excluded. We will consider also the recent REA (June 2025) of Interventions to support smallholder farmers' transitions to sustainable agricultural practices in low- and middle-income countries, aiming to build on relevant findings.

Initial timeframe: 2015 onwards, beginning with publications since 2020 in phase 1 and potentially widening to 2015 in the second phase depending on the volume of evidence.

### DATA EXTRACTION (SELECTION/SCREENING, CODING AND MANAGEMENT)

After completing the search, we will collate and remove duplicate records before assessing studies against the REA's inclusion and exclusion criteria based on titles and abstracts (see above). We will use a two-stage process for selection: 1) one person will screen titles and abstracts of studies identified by the search; 2) a second person will independently review 20% of studies for inclusion to confirm decisions of the first reviewer.

Full texts will be obtained and screened when a decision cannot not be made based on title and abstract. Any disagreements will be resolved by discussion, or by involving a third reviewer if a consensus cannot be reached.

Data from all included material will be coded and extracted into a data extraction template for the following areas:

- Context, i.e., type of participant, geographical context etc.
- Intervention(s) (policy reform)
- Study designs and analytical methods
- Outcome measures
- Results and findings
- Enablers and Barriers

### QUALITY APPRAISAL

Quality of the studies will be critically assessed using a Quality Appraisal tool suitable for both quantitative and qualitative studies[20], although we expect the studies to be mainly qualitative.

This tool encompasses the following three domains, with three dimensions within each domain:

1. **Cogency**: Does the study provide a convincing causal argument and/or contribution story?
2. **Transparency:** Is there a clear and rigorous methodology for sampling, data collection, and analysis?
3. **Credibility:** Is the research process logical, traceable, and clearly documented? Is there clear description of how conclusions and interpretations were reached?

Scores of 0 or 1 may be applied on each of the three domains: 0 not met, 1 met. An overall score would be: 0 not met (if any of the dimensions are not met), 1 partially met (if one or two dimensions are met), 2 met (if all dimensions are met).

[20] See Mader et al 2022.

Combining the scores from the three domains gives an overall confidence of between 0 to 3, categorised as follows:

| Confidence level | Combined score |
|---|---|
| High | 3 |
| Medium | 2 |
| Low | 0 or 1 |

Studies that receive a confidence score of 2 or 3 (i.e. those that are of medium or high confidence level) will be included in the next stage.

## ANALYSIS AND SYNTHESIS

We will analyse and synthesise the findings from the included studies in Stage 2 using thematic analysis.[21] This involves identifying, examining and recording patterns (or 'themes') within the data, recognising that the study will draw primarily on qualitative data and evidence, which will inform the understanding of policy reform pathways. Initial themes will be informed by the ToC, including assumptions, with other themes emerging organically during analysis. The approach therefore provides a structured yet flexible approach to synthesis to address the review question, focusing on what has been effective, how, for whom and in what contexts.

## SEARCH TERMS

("Policies" OR "policy" OR "Policy reform" OR "subsidy reform" OR "input subsidies" OR "fertiliser payment" OR "fertilizer payment" OR "output subsidies" OR "market price support" OR "consumer subsidy" OR "Subsidy" OR "Subsidies" OR "Payment for environmental services" OR "PES" OR "Green finance" OR "subsidy repurpose" OR "Policy reform pilot" OR "subsidy reform pilot" OR "grants" OR "incentives" OR "regulation" OR "governance" OR "Property rights" OR "Tenure" OR "Nature positive agriculture") AND ('triple wins' OR "climate benefits" OR "carbon sequestration" OR "emission reduction" OR "Nature Benefits" OR "ecosystem restoration" OR "biodiversity" OR "poverty reduction" OR "nutrition" OR "food security" OR "health" OR "livelihoods" OR "poverty alleviation" OR "improved livelihoods" OR "income") AND ("Europe" OR "United Kingdom" OR "Great Britain") AND ("Smallholder farmer" OR "Small-scale farmer" OR "Pastoralist" OR "Forest keeper" OR "Fisher" OR "Commercial farmer" OR "Agribusiness" OR "Value chain actor" OR "market actor" OR "consumer" OR "Women" OR "Extreme poor" OR "Marginalised groups" OR "People with disabilities" OR "disabled" OR "Indigenous people " OR "men" OR "youth" OR "old people" OR "young people" OR "elderly") AND ("Sustainable farming" OR "Sustainable agriculture" OR "Rural transition" OR "Just rural transition" OR "Social equity" OR "Gender equality" OR "Women's empowerment" OR "Youth empowerment" OR "Reduced greenhouse gas emissions" OR "Mitigation" OR "Adaptation" OR "Food security" OR "Poverty alleviation" OR "Transformation of food systems" OR "Transformation of agricultural systems" OR "Resilient food systems" OR "Nutrition" OR "Agricultural reform" OR "Agricultural transition" OR "Improved livelihood" OR "Transformational change" OR "Low emission farming" OR "Resource efficient farming" OR "Low-carbon farming" OR "Water " OR "conservation")

Agriculture AND ("Policies" OR "policy" OR "Policy reform" OR "subsidy reform" OR "Regulation(s)") AND ("Low-income countries" OR "Middle-income countries" OR "Low- and middle-income countries"

[21] Braun, V. and Clarke, V.2021 Thematic Analysis: A Practical Guide. SAGE Publications Ltd.

OR “LMIC” or “Developing countries” OR “Non-Annex I countries” OR “Global South” OR “Africa” OR “Sub-Saharan Africa” OR “Asia” OR “South Asia” OR “Latin America” OR “Central America” OR “emerging economies” OR “Philippines” OR “Brazil” OR “Indonesia”)

Agriculture AND (“Policies” OR “policy” OR “subsidy reform” OR “Policy reform” OR “Regulation(s)”) AND “Support” OR “Property rights” OR “Tenure” OR “Nature positive agriculture”

Agriculture AND (“Policies” OR “policy” OR “Policy reform” OR “subsidy reform” OR “Regulation(s)”) AND (“Finance” OR “Skills” OR “Training”)

## LONG LIST OF SEARCH TERMS

*POLICIES/INTERVENTIONS*

(Policies” OR “policy” OR “Policy reform” OR “subsidy reform” OR “input subsidies” OR “fertiliser payment” OR “fertilizer payment” OR “output subsidies” OR “market price support” OR “agricultural finance” OR “consumer subsidy” OR “Subsidy” OR “Subsidies” OR “Payment for environmental services” OR “PES” OR “Green finance” OR “subsidy repurpose” OR “agricultural support ” OR “Policy reform pilot” OR “subsidy reform pilot” OR “grants” OR “incentives” OR “regulation” OR “governance” OR “Property rights” OR “Tenure” OR “Nature positive agriculture”)

*IMPACTS*

(‘triple wins’ OR “climate benefits” OR “carbon sequestration” OR “emission reduction” OR “Nature Benefits” OR “ecosystem restoration” OR “biodiversity” OR “wellbeing” OR “poverty reduction” OR “nutrition” OR “food security” OR “health” OR “livelihoods” OR “poverty alleviation” OR “improved livelihoods” OR “income”)

*GEOGRAPHY*

[can add full list of eligible countries – depending on how long the maximum search string can be]

(“Low-income countries” OR “Middle-income countries” OR “Low- and middle-income countries” OR “LMIC” or “Developing countries” OR “Non-Annex I countries” OR “Global South” OR “Africa” OR “Sub-Saharan Africa” OR “Asia” OR “South Asia” OR “Latin America” OR “Central America” OR “emerging economies”)

*FARMERS/OTHER STAKEHOLDERS*

(“Smallholder farmer” OR “Small-scale farmer” OR “Pastoralist” OR “Forest keeper” OR “Fisher” OR “Commercial farmer” OR “Agribusiness” OR “Value chain actor” OR “market actor” OR “consumer” OR “Women” OR “Extreme poor” OR “Marginalised groups” OR “People with disabilities” OR “disabled” OR “Indigenous people ” OR “men” OR “youth” OR “old people” OR “young people” OR “elderly”)

*INTERVENTIONS*

(“Policies” OR “policy” OR “Policy reform” OR “Regulation(s)” OR “Property rights” OR “Tenure” OR “Stakeholder engagement” OR “agricultural support” OR “Subsidies” OR “agricultural finance” OR “Payment for environmental services” OR “PES” OR “Green finance” OR “Nature positive agriculture”)

*OUTCOMES*

("Sustainable farming" OR "Sustainable agriculture" OR "Rural transition" OR "Just rural transition" OR "Social equity" OR "Gender equality" OR "Women's empowerment" OR "Youth empowerment" OR "Reduced greenhouse gas emissions" OR "Mitigation" OR "Adaptation" OR "Food security" OR "Poverty alleviation" OR "Transformation of food systems" OR "Transformation of agricultural systems" OR "Resilient food systems" OR "Triple win" OR "Nutrition" OR "Agricultural reform" OR "Agricultural transition" OR "Improved livelihood" OR "Transformational change" OR "Low emission farming" OR "Resource efficient farming" OR "Low-carbon farming" OR "Water " OR "conservation" OR "Improved biodiversity")

*POLICY ACTORS*

(government OR "local government" OR "regional government" or "national government, OR "sub-national government")

## POLITICAL ECONOMY GLOSSARY OF TERMS

**Accountability:** Accountability is the obligation of people in leadership positions (duty bearers) to take responsibility for their actions, to explain their actions to the public, to commit to ethical standards, to be exposed to public scrutiny, to be willing to accept feedback on performance and to be subject to sanctions for violations of public duty. The concept is often used to refer to the systems by which duty bearers are held to account for their actions through monitoring, feedback, rewards and sanctions. The term 'vertical accountability' refers to mechanisms by which citizens (and their associations) hold government to account (e.g. through citizens participating in elections or advocacy campaigns). The term 'horizontal accountability' refers to the mechanisms by which different sections of government (i.e. executive, legislature, judiciary) hold each other to account (checks and balances).

**Actors or stakeholders:** are participants in a process, whether individuals or organisations. They vary in their power, interests and the types of decisions and actions they take. In the PEA framework suggested in this course, actors are one of the three building blocks (the others being structural or foundational factors, and institutions or 'rules of the game'). Foundational factors and institutions create incentives that shape actors' decisions and actions.

**Bargaining:** This is a mechanism whereby actors engage with each other to negotiate for a mutually acceptable outcome. Problems arise when bargaining is unbalanced in terms of power or works poorly. Bargaining may take place through formal (including through constitutional mechanisms) or informal mechanisms. Bargaining happens at all levels and will be shaped by the level of power of those involved, manifested for instance through control of resources, threat of violence, or status. See Whaites, The Beginner's Guide to PEA (2019) Link

**State-society bargaining:** State-society bargaining may be seen as 'interactions between state institutions and societal groups to negotiate how public authority is exercised and how it can be influenced by people. See GSDRC topic guide on state-society relations.

**Capability trap:** According to Pritchett, Woolcock and Andrews of Harvard University, a capability trap is a common situation where the capability of the state is severely limited or improves very slowly, which arises from a) mimicking global 'best practices' to signal good will to donors, and b) 'premature load bearing', where unrealistic expectations lead to stresses on existing systems, causing capability to weaken. See this reference.

**Clientelism:** A social order or political system based on the relationship of patron to client. Clientelist relationships are unequal and are based on conditional exchange through which political support is traded for the promise of privileged access to goods, services or jobs. For example businesses may get special protection if they contribute to political campaign funds and official appointees may make ongoing payments back to the appointing authority or individual (also known as 'prebendalism'). (one minute explainer video).

**Club goods** are superficially similar to public goods but differ in being excludable; in other words, availability can be limited to members of a 'club' or other defined category of users. They are also at least partially rivalrous (because their benefits are reduced by overcrowding). In principle, excludability enables the collection of charges, which can be used to fund the provision, although this option may not be adopted as a matter of policy.

- Examples of club goods are numerous and include highways, parks, cattle dips and the internet. Note that health and education services involve a mixed bag of partially and wholly rivalrous (and in this sense private) goods.

**Collective action problem:** A situation in which a group of actors (which can be individual persons or organisations, including nation-states) would all benefit from a certain action, but the pursuit of individual self-interest prevents this happening. In a common case, there is no arrangement to ensure that the costs would be shared among those benefiting (and thus to limit 'free riding'). As a result, individuals are discouraged from contributing to the action. Collective action problems are solved when there are institutions (e.g. disciplinary powers vested in leaders), organisations (e.g. a trade union) or shared norms (e.g. in a culturally homogeneous village) that limit free riding.

- Example: In a country some years ago, business leaders indicated they did not wish to confront the government over the latter's failure to improve infrastructure and provide other public goods. The reason was the risk that individual businesses that protested would be victimised by government. Combined actions by many businesses together would no doubt have reduced this risk, but because of the size of the group, this would have required organisation, and the first movers would have been subject to victimisation.

**Complex system:** A system comprising many unique elements that interact in multiple ways. The elements themselves can change, learn, and adapt. The connections can change, loosen, reform, and the boundaries of the system can also shift over time. Although the terms are used interchangeably in ordinary speech, scientific literature distinguishes between systems and tasks that are complex and those that are merely complicated. Systems of human interaction are complex because the components are unique individuals who not only react to each other but learn, organise and change their behaviour in ways that are not regular or easily predictable. A jet engine, in contrast, is a complicated rather than complex system. To understand and build a jet engine, engineers need a lot of knowledge of engineering principles and good data. But so long as all of this information is available, an engineer can fully understand, build and predict the behaviour of the engine.

**Credible commitment:** A promise made by one actor that is thought to be believable by those to whom the promise is made. This credibility tends to arise from there being some cost to the actor making the promise if it should be broken.

**Dutch disease:** The phenomenon first observed in the Netherlands where income from the export of oil (or other valuable natural resource) forces up the exchange rate of the national currency, thereby

making other exports (e.g. agricultural products and manufactured goods) less competitive in international markets.

**Economic rent:** The difference between what a factor of production (land, labour or capital) is paid and how much it needs to be paid to keep it in its current use. A rent is an 'extra' income associated with control of resources that are in limited supply, including mineral wealth; monopolistic business opportunities, including those created by government regulation of markets; and governmental decision-making authority (e.g. concerning award of public contracts). Rents may be illicit (as in corrupt contracting) but are not necessarily so and may arise from legal practices (e.g. government decisions to restrict competition). Resources derived from rents can be used in different ways with positive and negative consequences for development and social stability. (one minute explainer video)

Examples:

- In Nigeria, it costs say US$50/barrel to produce oil, meeting all costs of production including a return on capital sufficient to keep the companies producing. The world price is currently around $70. The economic rent is the difference, i.e. $20 per barrel.
- As an incentive to innovate, a pharmaceutical company is awarded patent protection (usually for a fixed period) for a product it brings to market, e.g. the anti-malarial Malarone. A tablet costs say $0.10/tablet to make; it can be sold for $1.00. The rent is $0.90.
- A Minister of Finance is empowered by law to exempt companies importing essential goods like cooking oil from paying import duties if s/he judges that citizens are likely to be affected by shortages. Some firms benefiting from such exemptions show their gratitude by contributing to the election funds of the Minister or the Minister's party. This earning over and above the Minister's salary is termed a rent by analogy with the strictly economic examples.

**Foundational factors:** These are the wide range of contextual features, operating at a given level, that shape the nature of the institutions and the options available to the various actors. While such factors may include long-term institutional legacies (such as how the geographical borders of a country came to be defined), for the purpose of the analysis, they are 'fixed' constraints (at least in the short-term). They are relevant because of the way they limit or enable the development of institutions or the actions of actors in the present and future. In the PEA framework suggested in this course foundational factors constitute one of the three building blocks (the other two being institutions and actors).

Examples of foundational factors, likely to be relevant at different levels, from the local to the global, include:

- Topology/geography and location of the country
- Natural resource endowment and climate
- Demographic profiles and trends
- Economic and social class structures
- Nature of technologies available

**Game theory:** Game theory is a theoretical framework for modelling interactions among competing or cooperating actors. The intention is to explain why particular actors adopt particular types of behaviour (sometimes conflictual, sometimes cooperative) as a result of their interactions with other actors in a context of incomplete information. Game theory concepts include:

- Conflictual games occur whenever the gains of one player or players come at the expense of another player or set of players, meaning that there will be 'winners' and 'losers'. These situations are also referred to a 'zero sum games'. An example would be targeted health resources – assuming a fixed pot of money for health, greater resourcing for maternal health care, for example, means that fewer resources are spent on other health priorities.
- Cooperative games occur in situations where all parties can gain so long as they successfully coordinate their actions. These situations are also referred to as 'positive sum games'. An example would be traffic rules where everyone benefits from adhering to basic rules such as driving on the opposite side of the road to oncoming traffic.
- Mixed games refer to situations where both parties will be better off if they cooperate. However, they have different preferences over what plan to cooperate on. For example, the Prime Minister and the Energy Minister may agree on the need to transition away from fossil fuels, and each needs the other to succeed. However, they may disagree on whether to opt for nuclear or wind power.
- Principal-agent problem. See principal-agent relationship.
- Free-rider problem. Whenever one person cannot be excluded from the benefits that others provide, each person is motivated not to contribute to the joint effort, but to free-ride on the efforts of others. If all participants choose to free-ride, the collective benefit will not be produced.
- Prisoners' dilemma. The prisoners' dilemma is a game theory scenario that shows how in some situations it is rational for two actors not to cooperate even though it is in their collective best interest to cooperate.
- Tragedy of the commons. The tragedy of the commons is a situation where a shared resource is overconsumed by individuals who act in their own self-interest while disregarding the collective interest in conserving the resource. Common property or common pool resources, such as fisheries, are often subject to the tragedy of the commons.

**Gender:** Gender refers to socially constructed roles in the relations between women and men and girls and boys. Such roles are learned, contested and redefined over time. Gender is an important factor (alongside others) shaping social dynamics and power relations and is an essential variable in helping to understand who is included/excluded in power, how and why, and what this implies for prospects to promote progressive change.

**Governance:** Governance is defined as the manner in which power is exercised for the management of economic and social resources for development.

**Historical legacy:** This relates to the question of how history matters in the contemporary world and the extent to which it can explain politics, the economy, culture and social attitudes at the current time. Historical legacies are often apparent in the form and functions of institutions which developed under different conditions in the past but are slow to adapt and may no longer fit the present context.

**Incentives:** The rewards and punishments that are perceived by individuals to be related to their actions. These can be both material and non-material in nature, the latter including ideology, values and beliefs. The term covers a very broad range of things, among which schemes created to motivate particular categories of people (e.g. staff bonuses) are a particular example. Closely related to incentives is **motivation** which may be defined as forces acting either on or within a person to initiate behaviour

**Information asymmetry:** A situation where one actor has more information about relevant matters than another actor and is in a position to use that information to gain some sort of advantage.

Examples:

- A maker of any complex product (e.g. pharmaceuticals, processed foods (e.g. baby food) or machinery) will have much more information than the average customer of what the product contains, its quality, and the costs and benefits of using it.
- Legal and medical professionals have more knowledge than their customers on the service being provided.
- In a less technical way, the Head Teacher of a school has much more information about what is going on in the classrooms than does the Director of Primary Education at the Ministry, whose job it is to ensure quality teaching.

**Institutions (or rules of the game):** The rules and regulations, laws, codes or social norms that govern the way people or organisations behave in a particular field of activity, and the mechanisms by which these rules are enforced. In the PEA framework suggested in this course institutions constitute one of the three building blocks, along with foundational factors and actors. Institutions can be either formal (laws, regulations) or informal (norms and implicit understandings, often rooted in culture, including family and kinship relations). In political economy analysis, it is usual to use a different term – organisation – to refer to entities set up for a common purpose (see organisation). (one minute explainer video)

- Examples: The rules governing markets (who is allowed to participate, how disputes are resolved, etc.) are economic institutions; constitutions are formal political institutions, while patronage arrangements are informal political institutions; chieftainship is a social institution. The rules and regulations, laws, codes or social norms that govern the way people or organisations are supposed to behave in a particular field of activity, and the mechanisms by which these are enforced. Institutions can be either formal (laws, regulations) or informal (norms and implicit understandings, often rooted in culture, including family and kinship relations). In political economy analysis, it is usual to use a different term – organisation – to refer to entities set up for a common purpose, like banks, political parties or development agencies.

**Intervention Strategy.** The intervention strategy describes what an external actor can do to support a particular pathway of change. The strategy should be clearly linked to the pathway of change and should show how the international actor can support particular elements of this. In most cases international actors are recommended to work 'with the grain' of domestically driven pathways of change rather than unrealistically assuming that they can push change in a completely different direction. However, it may be possible to use well-judged and well-timed interventions to nudge the change pathway in a particular direction and towards a particular desired outcome.

**Legitimacy:** Legitimacy refers to the public acceptance of authority, usually a government, political system or power vested in a particular leader. Legitimacy can arise through traditional authority, charismatic leadership, adherence to democratic principles, the performance of public duties according to societal expectations or demonstrated good performance in holding off external threats or delivering on development goals.

**Moral hazard:** The incentive that someone has to act irresponsibly when someone else has given them an implicit or explicit guarantee that they will be protected from the consequences. Some argue that aid donors have this effect on governments that receive aid.

**Neo-patrimonialism:** A hybrid form of state in which patrimonial relationships (see patrimonialism) pervade political and administrative systems that are formally constructed on rational-legal lines (that is, regulated by a Constitution, legal frameworks and bureaucratic procedures). In other words, a neo-patrimonial system is one in which a position of authority is used for personal gain, not recognising a strict division of the private and public spheres.

**Organisation:** An organised group of people with a particular purpose. In the PEA framework suggested in this course, organisations are seen as one form of actor (the other form being individuals), and are distinguished from institutions.

- Examples: Forms of organisations commonly relevant to PEA include businesses, political parties, NGOs, government departments, and development agencies.

**Pathway of change:** An outline of how change towards a given outcome might happen and why this is realistic taking due account of the relevant political-economic constraints and opportunities.

**Patrimonialism:** A form of governance in which there is no clear distinction between the wealth of the leader (emperor, king, sultan or president) and the wealth of the state or the people. The term was famously used by Max Weber to distinguish some early-modern political systems in Europe and Asia from those of feudalism and modern capitalism, in both of which such a distinction exists.

**Patronage:** The power of 'patrons' to control appointments to public offices or the allocation of other privileges in exchange for the support of their 'clients'. This contrasts with a merit-based system where benefits are distributed on more impersonal criteria (e.g. competitive exams, formal qualifications) (one minute explainer video).

**Political settlement:** A tacit bargain or power equilibrium among elites, and between elites and their followers, that prevents resort to civil war. The term elite bargain is also used interchangeably with political settlement. Political settlements usually involve informal deals over the allocation and use of rents (see economic rents), which in turn influence the institutions that are adopted and how they work (see institutions). In developing countries political settlements are usually clientelistic, but they vary in respect of a) the degree to which power at the elite level is dispersed or concentrated, and b) the extent and breadth of the power exercised by non-elite groups. (one minute explainer video)

Examples:

- In Somaliland, internal conflict was brought to an end (for over 25 years, at least until an outbreak of violence in 2023) by an agreement signed in 1997 by three groups of influential players: clan elders, half-a-dozen business leaders; and the former leaders of the military Somali National Movement. In contrast, peace agreements in South Sudan repeatedly break down, because there is no underlying political settlement.
- In England, following decades of conflict and culminating in the Glorious Revolution of 1688 when King James II was deposed, a new political order was established under which the monarch never again was able to exercise great power on the basis that he/she was appointed by God, and without the consent of Parliament.

- In Lebanon, the political settlement is based on the sharing of power between different elites based on their 'confession' (i.e. religious group). The Taif Agreement which ended the civil war (1975-1989) splits power between multiple Islamic and Christian confessional groups (e.g. Sunni, Shia, Maronite and Melkite Catholic, Greek Orthodox, Armenian, and several others). The composition of the government is designed to reflect these confessional splits. This strongly encourages clientelist politics.

**Politics:** Politics concerns the distribution, use, control, consequences of power and how these processes are applied to important societal issues including the distribution of resources, establishment of laws and discussion of ideas and ideology.

**Principal-agent relationship:** A relationship between two actors, one of whom (the agent) is expected to act on behalf of the other (the principal). Principal-agent problems arise when the two have different interests and the agent has more relevant information than the principal (see information asymmetry). The agent may then be motivated to act in his/her own interests rather than in those of the principal, and the principal may not have enough information to prevent this. Principals can be political leaders or managers; but, in a democracy, they can also be the ordinary citizens whom politicians and public officials are supposed to serve.

Examples:

- In the context of schooling, a parent may be the principal, and the teacher the agent. In health services, the patient may be the principal and the health-worker the agent. In both these cases, the relationship may be complicated by the fact that the agent may have (a) somewhat different interests from those of the principal, (b) more knowledge, and (c) more power (social, political and financial).
- In the case of limited companies, the managers (who are the owners' agents) may pursue their own interests (for instance high pay) that differ from those of the owners (the principals.)

**Public good:** A good that is both 'non-excludable' and 'non-rivalrous'; that is, a good that individuals cannot be effectively excluded from using and where use by one individual does not reduce availability to others – for example, clean air, knowledge, lighthouses, an efficient civil service or national defence. Public goods tend not to be produced by private enterprise despite their importance, because there is no way the costs can be recovered by the suppliers. State action is typically necessary. Note that services in health and education are often publicly provided not because they are public goods but because they involve positive social externalities and/or for equity reasons. See also club goods.

**Reform entrepreneur/development entrepreneur:** An actor who seeks a specific developmental change using an entrepreneurial logic, rather than a planning logic.

**Rent:** See economic rent.

**Rent seeking:** The attempt to generate income by manipulating the social or political environment to create a flow of rent.

**Resource curse:** The negative effect on government accountability to citizens that is noticed when governments gain so much revenue from natural resource extraction that they do not need to collect taxes from individuals or firms.

**Rules of the game:** See institutions.

**Social contract:** An implicit or imagined contract between the state and its citizens which defines their mutual obligations, for example that the state should respect personal freedoms and property rights, provide services and social protection, and that citizens should obey the law, pay taxes, provide military service, etc. Social contracts vary by context, but in all cases, and insofar as they exist, they help define what a government can legitimately do and what its citizens can legitimately expect.

**Sovereignty:** In political theory, sovereignty is the ultimate authority in the decision-making process of the state. It also encapsulates the idea of the right of a state to govern its own territory independently of external powers.