

Agroecology Financing Analysis Toolkit (AFAT) for the public sector in Africa

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Contents

Acronyms and abbreviations	3
PART I. CONTEXT AND METHOD	4
Background and context	4
Defining agroecology	6
Methodological development	7
When and how the AFAT can be used	8
PART II. THE AGROECOLOGY FINANCING ANALYSIS TOOL (AFAT)	9
Step 1: Identify projects/programmes and data sources	9
Overseas Development Assistance	9
National Public Sector	10
Step 2: Gather the data and enter it into the database	11
Step 3: Analyse budgets and documents using indicators, allocate and enter scores	12
Step 4: Results analysis	16
Annex 1: Literature review on practical studies on financing for agroecology	17
Annex 2: Gliessman's 5 levels of food system change aligned with FAO's 10 elements	20
Annex 3: Revised indicators/good practices and scoring per HLPE principle	21
References	25

Acronyms and abbreviations

ACT	Agroecology Criteria Tool
AFAT	Agroecology Financing Analysis Toolkit
AfDB	African Development Bank
AgR4D	Agricultural Research for Development
AU	African Union
BMGF	Bill and Melinda Gates Foundation
CAADP	Comprehensive Africa Agriculture Development Programme
CAFOD	Catholic Agency for Overseas Development
CGIAR	Consultative Group on International Agricultural Research
CIDSE	Coopération Internationale pour le Développement et la Solidarité
СоР	Community of Practice
DAC	Development Assistance Committee
DFID	Department for International Development
ESAFF	Eastern and Southern Africa Small Scale Farmers' Forum
EU	European Union
FAO	Food and Agriculture Organisation
FCDO	Foreign, Commonwealth and Development Office
FISPS	Farm Input Subsidy Programmes
GBP	Great Britain Pound
GCF	Green Climate Fund
GHG	Green House Gas
HLPE	High Level Panel of Experts
IFAD	The International Fund for Agricultural Development
IFC	International Finance Corporation
М&Е	Monitoring and Evaluation
MDB	Multilateral Development Bank
ODA	Overseas Development Assistance
OECD	Organisation for Economic Co-operation and Development
PSA	Partnership for Social Accountability
RSPB	Royal Society for the Protection of Birds
SDGs	Sustainable Development Goals
UK	United Kingdom
USDA	United States Department of Agriculture
WFP	World Food Programme



PART I: CONTEXT AND METHOD

Background and context

Small farms, measured as less than 2 hectares in size, account for 84% of all farms worldwide and produce 35% of the world's food (Lowder *et al.*, 2021). In Africa, the estimation is that there are 33 million small farms that contribute 70% of the food supply (IFAD, 2017). These small farmly farms play a multifunctional role, providing food, animal fodder, fibre and other goods, as well as employment, culture, and a way of life for millions of people.

The Green Revolution of the 1950s brought about industrialised agriculture based on increased usage of fertilisers, technologically improved seeds and the use of more chemicals and pesticides, all in a bid to increase production and productivity. Following the adoption of the African Union's Comprehensive Africa Agriculture Development Programme (CAADP) in 2003, one of whose main ambitions was to increase production and productivity by raising the level of soil fertility, the Abuja Declaration on Fertilizer for the African Green Revolution of 2006 also set the target of 50 kg of nutrients per hectare by 2015 from the 8 kg per hectare in 2006 (ADBG). This target, however, has yet to be reached by most countries (NEPAD, 2011). This in part is due to the increased cost of fertilisers (Guèdègbé, T. and Doukkali, 2018). A consequence of the massive utilisation of fertilisers is that agriculture has become more expensive, leading to increased external dependence for food security and environmental damage including soil degradation underground water pollution, and biodiversity loss from increased use of pesticides.

CAADP was reaffirmed by the Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods in 2014, in which African governments committed to attaining agricultural growth and contribution to their gross domestic product (GDP) of at least 6% per annum by 2025. To achieve this, amongst others, African governments committed to increasing their budgetary allocations to agriculture to at least 10% of the

total national budgets by 2025. In the third and most recent biennial review in 2021, only four countries (Burundi, DR Congo, Ethiopia, and Malawi) were on track with budget allocations, and only Rwanda, of the 51 countries that reported, was on track to achieve the seven Malabo goals, while 19 others were progressing well.

Practices that emanate from CAADP, however, such as input subsidies through farm input subsidy programmes (FISPs), have fallen short of substantially improving food security on the continent (ACB, 2016). While international and continental commitments promote support for smallholder farmers as a key strategy for achieving household food security, agricultural investment in the region has failed to adequately respond to their needs. Instead, large portions of national budgets are directed into FISPs by providing subsidies that reduce the price of synthetic fertiliser and seed (usually hybrid maize), which encourage farmers to adopt detrimental forms of high-energy, high-input industrial agriculture.

Faced with the real effects and impact of climate change, globally, countries have stepped up efforts to transform their agricultural and food systems. The adoption of agroecology, a more recent term for an old concept of nature-based agriculture, as a holistic approach to agriculture transformation, has gained significant prominence worldwide, particularly in the context of a changing climate (Sinclair, F., Wezel, A., Mbow, C., Chomba, S., Robiglio, V. and Harrison, R., 2019).

Underplayed in most regions of the world, there is now extensive evidence that small farm nature-based agricultural systems, or agroecology, can be as highly productive as industrial-intensive approaches, while also being more sustainable. Entrenched within agroecology is a multitude of other environmental and social benefits, including year-round access to healthy, fresh, diverse and culturally-appropriate food for local populations; reduced poverty, contributing to the realisation of the right to adequate food and nutrition; increased climate resilience and reduced greenhouse gas (GHG) emission; empowerment of women; diversified livelihoods; retention of valued local, tribal and indigenous knowledge and culture; improved health through reduced exposure to harmful agrochemicals; more resilient ecosystems; healthier soils and improved water management; lower costs, less debt and greater autonomy; and enhanced stewardship of seeds, crops, biodiversity, forests and natural resources.

On the African continent, more and more countries are now explicitly adopting agroecology in their national agricultural frameworks as a holistic approach to transforming their agricultural and food systems to improve food security, create wealth, reduce poverty and meet the commitments of the United Nations' Sustainable Development Goals (SDGs) and the African Union's Agenda 2063 more effectively. Currently 17 African countries plus the Economic Community of West African States (ECOWAS) and the African Union have joined the Agroecology Coalition, which emerged from the UN Food Systems Summit to promote agroecology. This transformation, however, requires substantive investment (both in mindset changes and financial terms) and the redirecting of investment to promote agroecological approaches throughout the whole food system.

International research has found that agroecological approaches are marginalised in existing funding streams, and when they are supported, it is often done in unhelpful and even damaging ways (CIDSE, 2021). FAO (2021) has acknowledged that current agricultural support "is biased towards measures that are harmful and unsustainable for nature, climate, nutrition and health, while disadvantaging women and other smallholder farmers in the sector." Globally, however, there remains insufficient budgetary commitments and allocations of human and natural capital to effectively implement agroecological practices on a broad scale. To address this, FAO (2021) advocated that by "repurposing agricultural producer support, governments can optimize scarce public resources to support food systems in ways that make them not only more efficient, but also more supportive of healthy lives, nature, and climate. This can also be an opportunity to achieve a strong economic recovery in a post-COVID-19 pandemic world."

As countries in Africa look to transition from industrial agriculture towards agroecology, this Agroecology Financing Analysis Tool (AFAT) has been developed by the Partnership for Social Accountability (PSA) Alliance² to assist its

^{1.} See https://agroecology-coalition.org/

^{2.} Partnership for Social Accountability (PSA) Alliance is a consortium of organisations including ActionAid International (AAI), Public Service Accountability Monitor (PSAM) of Rhodes University, Eastern and Southern Africa Small Scale Farmers' Forum (ESAFF) and SAfAIDS. The PSA Alliance works in Malawi, Mozambique, Tanzania, Zambia, and Zimbabwe, and at the regional level of the Southern African Development Community (SADC). The work of the PSA Alliance is supported by the Swiss Agency for Development and Cooperation (SDC).

members in their assessment of public financing for agriculture, with a focus on identifying the current levels of support, investment and commitment to agroecological transitions and climate resilient and gender-responsive agricultural practices which benefit smallholder farmers. In particular, the Tool helps analysts and activists answer the question: to what extent is current public financing for agriculture in Africa, from both overseas development assistance (ODA) and national budgets, supportive of a transition to agroecology?

Defining agroecology

To develop a practical approach to tracking financing for agroecology, we must start with a clear definition of what we are trying to measure and track. "Any study on financial support for agroecology needs to commit to a particular understanding, in order to be able to categorise its data" (Moeller, 2020:8).

A widely adopted characterisation of agroecology is that it is a science, a set of practices, and a social movement (Wezel et al. 2020). This broad statement aims to emphasise the multidimensionality of agroecology, that it is more than merely a set of fixed practices, but is rather a transformational approach to food and farming systems with environmental, economic, social and political dimensions. There is a strong tendency, especially in the mainstream, to try to reduce agroecology to its biophysical dimensions and to underplay or ignore the social and political dimensions that make it transformational. However, this broad characterisation needs to be given more specificity to be able to use the definition practically, for "planning, managing and evaluating agroecological transitions" (FAO 2018:2).

One critique of industrial agriculture is its one-size-fits-all, standardised approach to practice. In agroecology, activities or practices are by definition context specific. Therefore, rather than generating a list of practices that must be present to categorise a farm or landscape as agroecological, the approach is to develop a consolidated set of elements or principles of agroecology, with associated indicators which link open-ended practices or activities to the principles. The first consolidated effort at creating a common frame was the UN Food and Agriculture Organisation's (FAO's) 10 elements (FAO 2018). Several studies looking at financing for agroecology used this framework. However, in 2019, the High-Level Panel of Experts on Food and Nutrition Security (HLPE) of the Committee on World Food Security (CFS, under the FAO) developed 13 principles of agroecology which incorporate the FAO 10 elements but emphasise the social, food systems and economic dimensions of agroecology (HLPE 2019).

For this Tool, we have adopted the HLPE 13 principles as the framework for analysis. We find the principles to be comprehensive, although there will always be elements that get lost in any simplification process. This means the framework must be open to adaptation without losing what is common across contexts. To make the framework easier to use, we have divided the principles into three overarching dimensions. Table 1 shows the HLPE principles and their alignment with the FAO elements.

Guided by these principles and while acknowledging that there is no single, consensual definition of agroecology shared by all the actors involved, nor agreement on all the aspects embedded in this concept, the HLPE proffered the following definition that an agroecological approach to sustainable food systems is:

"[O]ne that favours the use of natural processes, limits the use of external inputs, promotes closed cycles with minimal negative externalities and stresses the importance of local knowledge and participatory processes that develop knowledge and practice through experience, as well as scientific methods, and the need to address social inequalities" (HLPE 2019).

The HLPE further elaborated that an "agroecological approach to sustainable food systems recognizes that agri-food systems are coupled with social-ecological systems from the production of food to its consumption with all that goes on in between. It involves agroecological science, agroecological practices and an agroecological social movement, as well as their holistic integration, to address food security and nutrition" (HLPE 2019).

Table 1: HLPE principles of agroecology and alignment with FAO 10 elements

Pri	nciple	FAO's ten elements
	Environmental sustainability	
1.	Recycling. Preferentially use local renewable resources and close as far as possible resource cycles of nutrients and biomass.	Recycling
2.	Input reduction. Reduce or eliminate dependency on purchased inputs and increase self-sufficiency.	Efficiency
3.	Soil health. Secure and enhance soil health and functioning for improved plant growth, particularly by managing organic matter and enhancing soil biological activity.	Reflected in diversity, synergies, and resilience
4.	Animal health. Ensure animal health and welfare.	Reflected in resilience
5.	Biodiversity. Maintain and enhance diversity of species, functional diversity and genetic resources and thereby maintain overall agroecosystem biodiversity in time and space at field, farm, and landscape scales.	Part of diversity
6.	Synergy. Enhance positive ecological interaction, synergy, integration, and complementarity among the elements of agroecosystems (animals, crops, trees, soil, and water).	Synergies
7.	Land and natural resource governance. Strengthen institutional arrangements to improve, including the recognition and support of family farmers, smallholders, and peasant food producers as sustainable managers of natural and genetic resources.	Responsible governance

5	Social justice and participation	
8.	Co-creation of knowledge. Enhance co-creation and horizontal sharing of knowledge including local and scientific innovation, especially through farmer-to-farmer exchange.	Co-creation and sharing of knowledge
9.	Social values and diets. Build food systems based on the culture, identity, tradition, social and gender equity of local communities that provide healthy, diversified, seasonally and culturally appropriate diets.	Parts of human and social values, culture, and food traditions
10.	Participation . Encourage social organization and greater participation in decision-making by food producers and consumers to support decentralized governance and local adaptive management of agricultural and food systems.	Part of human and social values

E	conomic fairness and participation	
11.	Economic diversification . Diversify on-farm incomes by ensuring that small-scale farmers have greater financial independence and value addition opportunities while enabling them to respond to demand from consumers.	Part of diversity, circular and solidarity economy
12.	Fairness. Support dignified and robust livelihoods for all actors engaged in food systems, especially small-scale food producers, based on fair trade, fair employment, and fair treatment of intellectual property rights.	Part of human and social values
13.	Connectivity. Ensure proximity and confidence between producers and consumers through promotion of fair and short distribution networks and by re-embedding food systems into local economies.	Part of circular and solidarity economy

Source: Wezel et al. 2020:7, reordered and adapted to include overarching dimensions

Methodological development

Our methodology started with a review of existing studies on financing for agroecology. The objectives of this review were first to identify methodologies for gathering and analysing information about financing on agroecology based on actual financial flows, and the second was to synthesise the results of the studies on financing for agroecology. A synopsis of

the results can be found in Annex 1. Most of the studies are on overseas development aid (ODA) from European countries, with few studies on tracking domestic financing on agroecology. African research will need to focus on ODA inflows and public expenditure analysis. Information on budgets and allocations is not always readily available and is mostly bundled together into more general programmes (e.g., extension, training). Information on detailed allocations to specific projects is not readily available. In such situations, it is difficult to allocate the portion being spent on agroecology.

Methodologically, most of the studies followed the Agroecology Criteria Tool (ACT) developed by Biovision (2019), which aligned the FAO's 10 elements of agroecology with a framework on levels of food systems change developed by Steve Gliessman (2015) (Annex 2). Incremental processes may be part of an agroecological transition, but in and of themselves will not be enough to ensure such a transition. These tend to focus on biophysical and farm level practices. In order to become transformational, these practices must be integrated into wider processes of food system change through deliberate redesign of agroecosystems at farm and landscape levels, inclusive and participatory forms of governance, co-production of knowledge, and social justice (Wezel et al., 2020:8). Biovision's methodological innovation was to align the Gliessman levels with the FAO elements to establish a method for practical analysis of the extent of agroecological practice and transitions. The studies revealed some methodological limitations of using the approach of filtering the FAO's 10 elements through the Gliessman levels.³ These are included at the end of the synopsis of results shown in Annex 1.

As a result of the literature review and discussions in the reference group and in the Coopération Internationale pour le Développement et la Solidarité (CIDSE)- and Centre for Agroecology, Water and Resilience (CAWR)-facilitated Community of Practice (CoP) on financing for agroecology, the HLPE principles were adopted as a framework, with specific indicators to be developed for each principle, and a scoring system based on a spectrum of values rather than a binary yes or no.

The PSA Alliance tool, AFAT, has gone through several revisions. An earlier version was piloted in Zimbabwe and Malawi and at regional level in the Southern African Development Community (SADC). At the same time, the CIDSE/CAWR CoP had further developed their tool. The revised version of the AFAT draws strongly on the work of CAWR and others in the CoP, as well as responding to comments on experiences in using the tool arising from the pilot studies. It remains a work in progress. Agroecology is irreducibly about context specificity, and the tool – in particular, the indicators – should be adapted to the specific context in which it is being used.

When and how the AFAT can be used

The Tool can be used for analysis of domestic programmes and budgets, both qualitatively to assess the extent to which programmes and projects are aligned with agroecological principles, as well as quantitatively to assess the proportion of budgets being allocated to agroecological practices.

Domestic programmes and budgets

- Domestic budget proposal consultations, debates, and budget speeches Analysis of government agriculture strategies and budgets to examine how government intend to support agriculture and agroecology in the next fiscal year.
- Domestic revenue and expenditure reports Analysis of domestic revenue and expenditure reports to compare the budgeted amount with how funds were actually dispersed towards agriculture and agroecology in the fiscal year.
- Monitoring the provision of public services Using social accountability monitoring tools (community scorecards, social audits, etc), to assess whether services funded through the budget are aligned to agroecology. Are they reaching smallholder farmers? What are the gaps?

Official Development Assistance (ODA)

• Domestic budget consultations on international development assistance – Analysis of government strategies and budgets dedicated to supporting international development assistance towards agroecology.

^{3.} Thanks to the advisory team for comments, in particular, Nina Moeller from Centre for Agroecology, Water and Resilience (CAWR) at Coventry University for additional materials and discussions.



PART II: THE AGROECOLOGY FINANCING ANALYSIS TOOL (AFAT)

Part II outlines the PSA Alliance's framework for analysing finance for agroecology and its key elements.

- Step 1: Identify the projects or programmes for which you will gather data and identify your data sources.
- Step 2: Gather and enter key project data into the database.
- **Step 3**: Analyse budgets and project/programme documents, using indicators for each of the agroecology principles, allocate scores as indicated in Annex 3, and enter scores into the database.
- Step 4: Analyse results as generated by the Excel spreadsheet.

Step 1: Identify projects/programmes and data sources

The first step is to identify projects / programmes⁴ and collect whatever information is available on these projects. Both overseas development assistance (ODA) and domestic public sector spending projects will be looked at.

Overseas Development Assistance

Overseas Development Assistance (ODA) is divided into bilateral and multilateral aid. Bilateral aid goes directly to the recipient country. Multilateral aid goes to institutions that then allocate funds to specific countries and activities.

^{4.} Ideally the aim is to analyse project level information. However, it may be the case that work is carried out on a programme basis rather than a project basis (e.g., input subsidies). This is particularly relevant for domestic public sector spending. As such, wherever projects are mentioned, this framework is also referring to programmes where relevant, as textual analysis can also be done on programme level documentation.

There are several initiatives at the global level to attempt to consolidate information on ODA; however, this data has limitations, as indicated in many of the previous studies. In particular, information is mostly incomplete or missing. Publicly accessible databases can at least form the basis for identifying ODA projects / programmes in a specific country. Some of these have downloadable lists of projects, while others are online searchable databases. These give a first level of information on the name of the project, donor country or entity, recipient country/region, dates, sector, budget, etc. To ensure the analysis is as comprehensive as possible, time can be spent time going through all of these databases.

Examples of multilateral projects include those by the World Bank, CGIAR institutions/research programmes, FAO, International Fund for Agricultural Development (IFAD), Global Agriculture and Food Security Programme (GAFSP) managed by the World Bank and International Finance Corporation (IFC), African Development Bank (AfDB), Green Climate Fund (GCF), Global Environmental Facility (GEF), and Adaptation Fund.

Bilateral projects are donor and country specific. An internet search will reveal the main donors by country, also country-level reviews in both donor and recipient countries will indicate which donors have been funding relevant activities. You can then select the most important based on whatever criteria you have set yourself.

The following are the steps to follow in identifying projects for analysis:

- Pull out all projects per database for the country of analysis.
- Select projects starting from your preferred start date (e.g., 2018 onwards)
- Review the project information (specifically the project title) and select projects in relevant fields such as
 agriculture livestock, forestry, fisheries, food security, nutrition, land, biodiversity, climate, natural resources,
 environment, water, rural development, (rural) energy. Within this, the PSA Alliance's focus is on public financing,
 extension, seed farm input distribution, access to markets, adaptation to climate change, gender, and youth, so
 these can be kept in mind.
- Insert the selected projects into the database (the template is provided in Figure 3. The Excel worksheet is available at this LINK.)
- · Consolidate information from the databases into your spreadsheet.
- · Remove any obvious duplicates (some projects may be reported in more than one database).

It is important to note that in this first stage you are looking for all projects / programmes in the selected categories, not only those with agroecological elements. Once you start analysing the selected projects as an overall population, you can then separate out those with some agroecological elements and those with none. This will allow you to also see how much support is still going to conventional agriculture as a comparison. But this first step is to assemble the full complement of projects, trying to be as comprehensive as possible. Even if you are unable to identify every single project at this stage, you can pilot the methodology based on those you can find; the report can state that analysis is based on projects found at that point in time.

National Public Sector

This is relatively pathbreaking work, as most of the existing studies looking at financing for agroecology have focused on ODA. The US study (DeLonge et al 2016) did look at domestic spending based on the USDA project database. However, public sector agriculture budgets in many African countries are not necessarily organised on a project basis, but rather as bigger nationwide programmes with activities derived directly from the programme rather than being allocated through individual projects. It may be tricky to get detailed information. For example, expenditure may be allocated to extension services but without any detail on what type of support is provided. In such cases, it will be necessary to review wider policy documents to get an idea of the overall orientation of the department or entity you are looking at.

The most obvious starting points for information on domestic plans and public sector spending are the national medium/long term development plans, election manifestos as well as National Treasury, relevant Ministries and Departments, and government development agencies. For research, there are also National Research Funds and

the agricultural research institutes. For our purposes, and to keep a tight focus, you can start with budgets and expenditure reviews at the Treasury and national departments dealing with agriculture, forestry, fisheries, climate, and environment. Where possible, it will be of value to identify specific projects within departmental programmes for inclusion in the database. The same database template can be used for domestic public sector projects/ programmes. One issue that has emerged from piloting the AFAT is an often-dramatic difference between the budgeted amounts and actual expenditure, which complicates analysis (Mdyetseni, Nyirongo and Kafunda, 2022). A possible response is to analyse expenditure reviews along with other documents.

Step 2: Gather the data and enter it into the databases

Once a list of projects/programmes has been assembled, the search for any information available on the project should then be undertaken, first and foremost through internet searches starting with official websites. Any documentation that can give further information on programmes and projects is needed; this can be from proposals, memoranda of understanding (MoUs), theory of change, logframes, descriptions, annual reports, reviews, monitoring and evaluation (M&E) reports, evaluations, project websites, new articles, etc. One can start with looking for any indication of goals, aims, objectives, planned activities, completed activities and results if available to see implementation.

If feasible or if contacts are available, one could send information requests to the relevant authorities asking if they have project lists and any project documentation. Freedom of information requests can also made through official channels. Theoretically, this kind of information should be freely available as it is public funding.

Follow up can also be made through key informant interviews, i.e., key people in government or donors who may give more information on projects or programmes, and potentially validate analyses.

Communities where government programmes are implemented can also provide critical information on the type of support that is offered, i.e., whether and to what extent agricultural extension officers, for example, provide support on adoption of agroecological approaches. Tools, such as community scorecards, social audits, and focus group discussions, can be used to collect insights directly from those who interact with government services to supplement the document review.

Where no information whatsoever can be found, set the project or programme aside and don't include it in the overall analysis. This can be indicated in your methodological discussion in reporting. The lack of publicly-available information can also be a finding of the research and form the basis for recommendations on improving access to information.

The database is developed as an Excel Spreadsheet (see Figure 3. Also at this LINK). The template has been set up to capture project information and automatically calculate the relevant agroecology scores based on information entered. The template is structured to capture:

- A unique project ID # (this is specifically for the PSA Alliance; each country will assign a specific project ID number to the projects in the database for easy of identification / reference starting from 1)
- · Title of the project/programme
- · Donor country or agency
- Project number given by donor or the country budget allocation code (if available)
- Project start date and end date
- Total budget, currency of budget, currency conversion ratio (based on the average exchange rate in the year the project started), and budget in US\$ (this has a formula and will be generated automatically)
- Scores for each of the HLPE principles (as will be discussed in the next sub-sections), total score, percentage score, and percentage of the budget (these latter three have formulas and will be generated automatically)

Step 3: Analyse budgets and documents using indicators, allocate and enter scores

There is a growing number of tools for agroecological assessments at both project and detailed on-farm levels. These tools, as well as all the studies discussed above in the literature review, have identified specific criteria or indicators that they have selected to assess elements of agroecology. Drawing from these materials, a list of indicators and good practices are identified for each HLPE principle. This is an open-ended list and should readily be adapted for local context. These are presented in Annex 3.

This is a double-pronged process involving both technical and financial analysis. The first sub-process that all selected documents, be they policy frameworks, or programme documents or project documents, should be subjected to is a technical or content analysis. This involves analysis and assessment of the content of selected documents against the 13 HLPE principles. This technical review allows for drawing insights, particularly from high level policy documents, on their focus for agroecology. Such high-level frameworks could include vision statements, or policy documents, most of which will not have a funded budget attached to them considering that they are guiding frameworks. A review of such high-level documents allows for the determination of the *level of focus* (not level of financial support) on agroecology. This is an important starting point as such frameworks anchors and direct where funding should go to and sometimes how the funding should be used. Therefore, using the framework analytical template (see Excel Spreadsheet in Figure 3. Also at this LINK). The steps are:

- · Read the project documentation, using the indicators per principle (Annex 3) as a guide on what to look for.
- · Assess each project according to the HLPE principles and provide a score for each principle.
- · Add the scores for an overall project score.
- · Generate a spider graph or bar graph or any other chart types for visual representation.
- Once all projects have been scored, conduct analysis by considering various clustered scores, for example
 total for all projects, median scores for ODA, domestic public sector programmes etc, and provide a narrative to
 describe and explain.

The second sub-process in the analysis is financial. This analysis derives from the scores attained during the technical review process. Therefore, using the same analytical template (see Excel Spreadsheet in Figure 3. Also at this LINK). the steps are:

- Using the total score per project, convert the score into a percentage out of the total possible 78 points (maximum of 6 points per each of the 13 HLPE principles).
- Using this percentage, allocate the project budget giving an estimation of funding allocated towards agroecology.
 There is a space in the template to convert local currency into US dollars to allow for standardised comparisons across projects and countries.
- Once all projects have their budgets allocated, conduct analysis by considering various clustered financial scores, for example total for all projects, median scores for ODA, domestic public sector programmes etc and provide a narrative to the financial scores.

Scoring is based on a spectrum of values as indicated in Annex 3. These range from zero, where the project explicitly embraces conventional agriculture through to 6 as a maximum, which indicates strong adherence to the individual principle. This is a subjective assessment and is based on your analysis of the documentation and your understanding of the way programmes and projects function. Table 2 gives an example of scores for an individual project, as well as total score and conversion to a percentage. Scores can be broken down into different categories for analysis. For example, you could indicate scores by domain (environmental sustainability, social, economic) and give an analysis. This can also reveal which dimensions are being better or less supported.

Table 2: Example of totalling scores

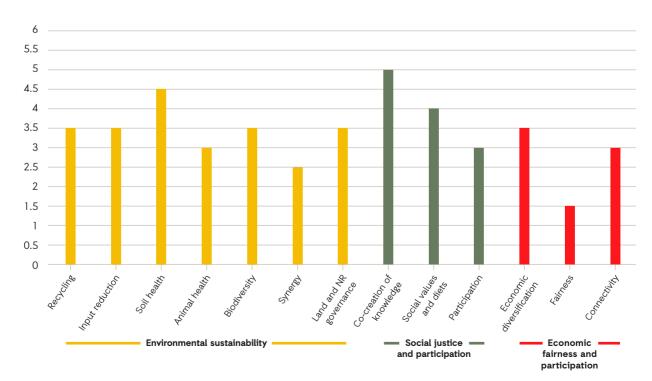
HLPE principle	Project 1 score	Project 2 score	Total score	Aggregate score	
Environmental sustainability					
Recycling	4	3	7	3.5	
Input reduction	3	4	7	3.5	
Soil health	5	4	9	4.5	
Animal health	0	6	6	3	
Biodiversity	3	4	7	3.5	
Synergy	2	3	5	2.5	
Land and natural resource governance	2	5	7	3.5	

Social justice and participation				
Co-creation of knowledge	6	4	10	5
Social values and diets	4	4	8	4
Participation	3	3	6	3

Economic fairness and participation				
Economic diversification	2	5	7	3.5
Fairness	0	3	3	1.5
Connectivity	2	4	6	3
Total score	36	52	88	44
Maximum (6 x 13)	78	78	156	78
Percent	46%	67%	56%	56%

Figures 1 and 2 show examples of graphs based on the scores in Table 2.

Figure 1: Example of a bar graph: Aggregate scores based on the figures in Table 2.





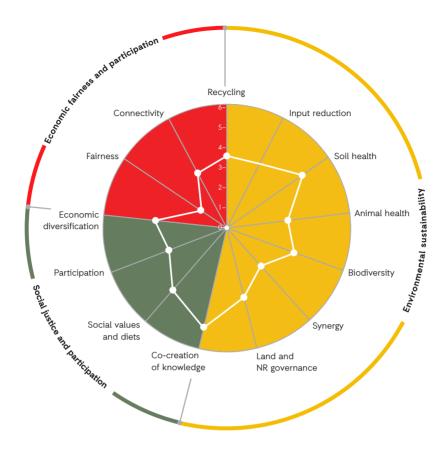


Figure 3 shows an example of a graph generated from an analysis of ODA in Zimbabwe (using an earlier version of the Tool, hence a different scoring scale). This shows participation and input reduction as the strongest principles, with synergy and connectivity the weakest. This analysis can be done for individual projects as well as for a group of projects or programmes. The spreadsheet is designed to automatically produce a graph for the combined projects.

Figure 3: Example of graph: Aggregate scores for ODA financing towards agroecolgy in Zimbabwe (based on an earlier version of the tool)

Source: Muchero, 2022

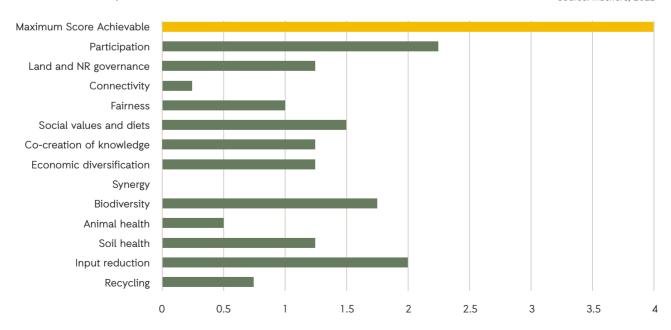


Figure 4 shows a similar graph but in the form of aggregate percentages across 45 analysed programmes in Malawi. The graph shows the percentage of analysed projects which include each principle. It shows co-creation of knowledge and then participation as the strongest principles, with animal health and social values and diets the weakest.

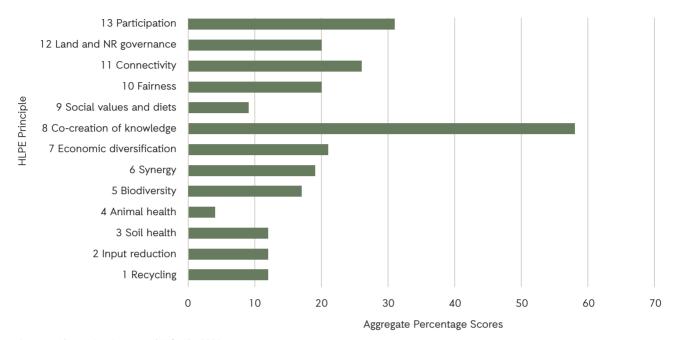
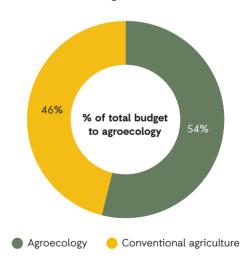


Figure 4: Example of graph: Aggregate scores across sub-programmes in Malawi

Source: Mdyetseni, Nyirongo and Kafunda, 2022

Finally, the score per project and overall can be converted into a percentage. This percentage can then be used to allocate a portion of the budget. Budgets should be converted to a common currency (US\$ proposed) for purposes of comparison (this is done in the template). For the example in Table 2, if the total budget for project 1 was US\$3 million, then the amount allocated to agroecology would be calculated as 46% of US\$3 million for project 1, which is US\$1,38 million. If the total budget for project 2 was US\$450,000 then the amount allocated to agroecology would be 67% of US\$450,000 for project 2, which is US\$301,500. The amounts also can be aggregated across all projects and divided by the total budgets for an overall figure and percentage. As the examples show, a big project with a lower percentage allocation to agroecology can still have a greater absolute value going to agroecology if compared with a small project with a higher share going to agroecology. The spreadsheet includes a column that automatically calculates a weighted percentage that you can use in reporting, which considers the combination of the overall budget of the project and the percentage allocated to agroecology.

Figure 5: Example of a graph: Percentage of the budget allocated to agroecology vs. conventional agriculture



Projects that support conventional agriculture only will have 0 of the budgets allocated but should still be included in the overall figures to show the true extent of financing going to agroecology. This is a relatively crude proxy. However, more precise allocation within projects is an acknowledged challenge in previous studies, given the available project or programme information. This is just a single number, but a pie graph can be generated to show this. In reporting, you can also indicate the total value of projects, and the percentage value allocated to agroecology.

In this paper, methodology development will be an iterative process, and can improve especially if project level information is more readily available. For now, this provides a rough estimate, which is a start. If a project operates across multiple sectors or in multiple countries, it is important to try as accurately as possible to identify the portion of the budget going towards relevant activities in the country being analysed.

Step 4: Results analysis

Deriving from the analysis, various reports can be produced for various audiences. Trends can be established by conducting analyses over time. Figure 3 depicts the AFAT Excel spreadsheet which can be accessed from the <u>LINK</u> here.

Figure 3: Depiction of the Agroecology Financing Analysis Tool Excel spreadsheet

Note: The table is one continuous table but for visibility purposes, it has been broken down into two parts.

Unique #	Title of project/ programme	Donor country / entity	Project # given by donor	Start date	End date	Total budget	Currency of budget	Multiplier for conversion to common currency (US\$)	Total budget in US\$
	Example (clear example data before starting)					450,000	US\$	1	450,000
	Example (clear example data before starting)					1,860,000	US\$	1	1,860,000
	Example (clear example data before starting)					12,000,000	US\$	1	12,000,000
	Example (clear example data before starting)					18,945,000,000	ZMK	6,19557E-05	1,173,751

Project score per HLPE principle (0-6)

Recycling	Input reduction	Soil health	Animal health	Biodiversity	Synergy	Land and NR governance	Co-creation of knowledge	Social values and diets	Participation	Economic diversification	Fairness	Connectivity	Total score	% score	Value of budget to agroecology (US\$)	Weighted % combined budget to agroecology
2	3	6	2	3	1	2	1	2	1	0	1	0	24	30.8	138,462	
4	6	4	4	3	2	5	4	3	4	2	4	2	47	60.3	1,120,769	
4	1	2	6	2	5	3	2	6	3	5	0	3	42	53.8	6,461,538	
6	2	3	2	3	4	4	5	3	2	2	6	3	45	57.7	677,164	
													0	0.0	-	
													0	0.0	-	
16	12	15	14	11	12	14	12	14	10	9	11	8			8,397,933	
4	3	3.75	3.5	2.75	3	3.5	3	3.5	2.5	2.25	2.75	2				54.2

Annex 1: Literature review on practical studies on financing for agroecology

DeLonge *et al.* (2016) looked at US domestic expenditure on agroecology, using the Gliessman levels as a framework. They identified and analysed 824 projects starting from 2014 from the US Department of Agriculture (USDA) Current Research Information System database, using "meta-categories" to select relevant projects. The analytical focus was on the non-technical summary, objectives, and approach because critical components of funded projects are likely to be mentioned in these (2016). The study found that 52% of projects related to sustainable agriculture at some level, of which 36% were categorised as Level 3 and above (about 19% of overall projects) (2016).

Pimbert and Moeller (2018) looked at UK development assistance to agroecology since 2010, using DFID's Development Tracker to explore aid flows from the UK government (2018). They also used Gliessman's levels as the framework, with addition of a process to define the extent to which agroecology was being promoted at each level (not at all, potentially, partially, fully - see below for more detail). Given the limited information available, they sidestepped the question of which part of each project budget was used to support agroecology and allocated the entire budget to one category or another. Of 181 identified projects, they found that none fully promoted agroecology at any of the levels. Seven projects (5% of the total budget) partially promoted agroecology but only at Level 1 (conservation agriculture), and 5% potentially promoted agroecology (2018).

Moeller (2020) analysed funding made available by the European Union (EU) in partnership with FAO, IFAD, the World Food Programme (WFP) and the Green Climate Fund (GCF) looking at international development assistance and climate finance and using the Gliessman levels as a framework. She elaborated slightly on the model, because some projects may cover enabling conditions for agroecology (such as participation or land access) but without specific environmental or agricultural actions. These were allocated their own categories ('governance' and 'social enablers'). Climate projects were screened for agricultural relevance. The study found that funding remains miniscule compared with what is needed. Eighty percent of EU funds channelled through the FAO, IFAD, and WFP and 79% of the GCF's agriculturally relevant investments support programmes and projects focusing on conventional agriculture and/or efficiency-oriented approaches such as sustainable intensification. Between 2016 and 2018, no EU disbursements to FAO, IFAD, and WFP and 11% of funds to GCF were made in support of 'transformative' agroecology (Level 3 or above) (2020).

Vermeylen and De Schutter (2020) reviewed the contribution of Belgian development cooperation to agroecology, based on the Gliessman levels and using budget commitments as an indicator based on a dataset of projects. It looked at government, multilateral and non-government funds. They found that 21% of the total budget was allocated to Level 3 and above (2020).

Biovision and the International Panel of Experts on Sustainable Food Systems (IPES Food) (2020) looked at funding for agricultural research for development (AgR4D) in Africa, focusing on Switzerland, the Bill and Melinda Gates Foundation (BMGF) and Kenya. The study found that "as many as 85% of projects funded by the BMGF and more than 70% of projects carried out by Kenyan research institutes were limited to supporting industrial agriculture and/or increasing its efficiency via targeted approaches, such as improved pesticide practices, livestock vaccines or reductions in post-harvest losses. Meanwhile, only 3% of BMGF projects were agroecological, i.e., they included elements of agro-ecosystem redesign. For Kenyan research institutes, the figure was 13%, with a further 13% of projects focussing on substitution of synthetic inputs (2020). By contrast, 51% of Swiss-funded AgR4D projects had agroecological components, and the majority of these (41% of all projects) also included aspects of socioeconomic and political change like decent working conditions and gender equality. Just 13% of Swiss-funded projects focused only on industrial agriculture and efficiency-based approaches" (2020). Less than 20% of funding in CGIAR Crop Research Programmes was allocated to Level 3 or above (2020). The study found that private agribusiness funding far outstrips any other source of funding for agricultural research and extension but there is little to no public information about these investments (2020).

Danish Church Aid (2020) assessed agricultural support delivered by Danida, and the extent to which it promoted climate adaptation and mitigation, and agroecology, based on official Danish reports of development assistance to the Organisation for Economic Co-operation and Development (OECD). They only looked at projects labelled as 'agriculture' and delivered through Danida, resulting in 19 projects in 2017-18 (2020), constituting 5% of total bilateral Danish ODA during this period (2020). They used the Gliessman framework. They found that 53% of projects considered climate change, with the majority ranked as 'significant' but only one as having a 'principal' focus on climate adaptation (2020:15). On agroecology, only 1% of the total budget for these projects was allocated to Level 3 and above, with 58% allocated to conventional agriculture. Almost all the rest was at Level 1 (2020).

Achterberg and Quiroz (2021) looked at Dutch overseas development assistance (ODA) spending on agroecology from 2010-2020, reviewing 260 projects based on information from the International Aid Transparency Initiative (IATI). They also used the Gliessman and FAO elements approach, as well as the extent of promotion pioneered by Pimbert and Moeller discussed above. They found that just 4% of total ODA to agriculture was allocated to Levels 3 and above (2021). Thirty five percent of the budget went directly to conventional agriculture, and another 34% to governance and social enablers but with the potential for agroecology unknown.

The Catholic Agency for Overseas Development (CAFOD) and the Royal Society for the Protection of Birds (RSPB) (2021, 2021a) assessed the contribution of UK aid spending to sustainable development based on UK ODA in 2019 using DFID/ Foreign, Commonwealth and Development Office (FCDO) and OECD DAC databases. They limited the analysis to programmes under the agriculture, forestry and fisheries codes and valued at over GBP2 million. In 2019, agriculture was just 4.2% of total UK ODA, of which 56% was bilateral aid (the rest was multilateral aid). They assessed programme objectives and indicators against a framework of six social and six environmental indicators that they developed themselves (2021). Projects were assessed against the framework and given a score out of a maximum of 24. Twenty-five programmes were assessed, of which 76% scored 6 or less, and only one scored above the median of 12. Only eight had any nature and climate indicators. Only one programme had more than two environmental indicators. Social indicators were more routinely included (23 of 25 programmes), but the focus was on income, jobs, and poverty reduction. Twenty-eight percent of projects were on strengthening local food systems and local market access (Level 4), and voice, agency and accountability were only covered in 16% of projects (2021).

Chiriac and Naran (2020) provided a methodology for tracking climate finance for small-scale agriculture and applied the methodology to selected international investments. While it did not specifically track agroecology, the methodology can be adapted to look at agroecological support. The study focused on primary investment from public and private sources directed toward low-greenhouse gas emission and climate-resilient agricultural development interventions with direct or indirect adaptation and mitigation benefits. The study offered overall estimates of funding requirements for smallholders in general, climate change adaptation, transitions to sustainable food systems, and agri-enterprise funding for Sub-Saharan Africa (2020). It provided a unique framework looking at the source of funds, instruments (e.g., grants, debt, subsidies), use, type of activity, first recipient and final beneficiary (2020). It estimated just 1.7% of total climate finance goes to small-scale agriculture (2017/18) and indicated that the majority of public international flows target large-scale, or general natural resource management (NRM) projects, without a specific focus on small-scale actors (2020).

Olivera and Popusoi (2021) conducted a systematic desk review of 207 IFAD projects completing in 2018-2023, of which 42 were in East and Southern Africa. As indicated above, IFAD has developed its own Agroecology Framework with 4 levels, based on FAO's 10 elements. As part of the filtering process, they identified three key elements of agroecology (resource use efficiency, recycling, integration of diversity) functioning as a 'traffic light' to check whether a project is sufficiently agroecological for further analysis (2021). IFAD's mainstreaming priorities – gender, youth, climate change, nutrition, and indigenous people – were also considered. They found that 44% of budgets had no element of agroecology at all, another 44% partially applied agroecology and 12% fully applied agroecology (2021). In the East and Southern Africa portfolio 43% of projects were non-agroecology, 45% were partial and 12% were agroecology-based (2021).

Savvidou *et al.* (2021) tracked development finance principally targeting climate adaptation from bilateral and multilateral funders to Africa between 2014 and 2018. They used data from the OECD Development Assistance Committee (DAC) (using Rio Marker methodology to identify adaptation projects⁵) and the Multilateral Development Bank (MDB) (Climate Components methodology). They found that the World Bank and African Development Bank (AfDB) were the main donors with 51% of adaptation projects between them (2021). Thirty percent of adaptation financing went to agriculture with only a small fraction to biodiversity (2021).

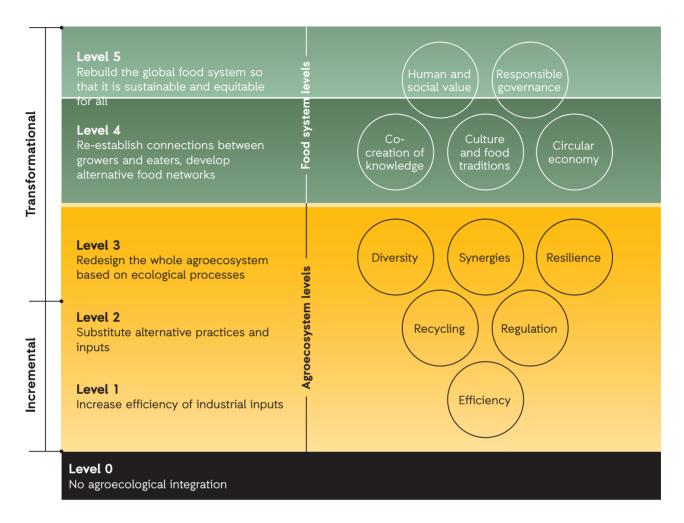
Overall, the literature shows that the majority of funds are still being allocated to conventional agriculture. That which enters into the Gliessman levels is heavily concentrated at Level 1. There are a few exceptions, in particular Switzerland, and to a lesser extent IFAD.

A number of methodological limitations arose from the practical application of the tools of analysis adopted in these studies, as follows:

- Although the Gliessman levels were not intended as a linear progression from resource use efficiency to sustainable food systems, the methodological design tends towards that reading. This reading has several limitations including that it presupposes a starting point from conventional agriculture, which truncates analysis of existing peasant-based systems and the types of support they may need; and that it implies that 'higher order' agroecological transitions must wait for 'lower order' levels to be completed.
- Alignment of FAO elements to Gliessman levels, with each element only allocated to one level, breaks down
 the intention that the elements are meant to be considered as inter-connected and integrated aspects of
 agroecology which, taken together, can indicate the extent to which specific activities in specific places can be
 defined as being more or less agroecological. This is a holistic analysis across all elements simultaneously, rather
 than allocation of isolated activities to individual elements.
- Related to this, FAO elements tend to be shoehorned to fit into just one Gliessman level whereas many of them are relevant across levels. For example, diversity is allocated to level 3, but it is equally relevant at level 2 (onfarm diversification of species) and level 4 (market diversification, dietary diversity). By restricting diversity to level 3, these important elements of diversity are lost.
- The HLPE 13 principles absorbed and extended the FAO 10 elements, incorporating stronger social justice and food systems elements. These elements could not be easily aligned with Gliessman's framework.

^{5.} Rio Markers (OECD) - an activity is eligible for the climate change adaptation marker if a) the climate change adaptation objective is explicitly indicated in the activity documentation, and b) the activity contains specific measures targeting adaptation (Danish Church Aid, 2020:14).

Annex 2: Gliessman's 5 levels of food system change aligned with FAO's 10 elements



Source: Biovision (n.d.), "Agroecology Criteria Tool", online: https://www.agroecology-pool.org/methodology/, based on Gliessman, 2015

Annex 3: Revised indicators/good practices and scoring per HLPE principle

Dimension	HLPE principle	AE score	Spectrum of values	Indicators / examples of good practices
Environmental sustainability		6	Relies only on natural processes and has mostly closed resource cycles using local renewable resources	
	Recycling	4	Favours natural processes and aims to close resource cycles whenever possible	 On-farm use of renewable resources (including energy) On-farm nutrient / biomass recycling Wastewater and waste recycling
	recoyouing	2	Makes some use of natural processes and resource cycles to keep leakage to a minimum, or when they support productivity and efficiency of labour.	Farm-saved seed (including seed banks and networks) Reusable or recyclable packaging
		0	Makes no effort to close resource cycles	
	Input reduction	6	Eliminates external inputs, satisfies needs on-farm (seeds, fertiliser, feed, water, energy)	Water use efficiency (including water harvesting, drip irrigation, on-farm water storage)
		4	Minimizes purchased/external inputs, relies entirely or mostly on local sources of inputs	Reduce or eliminate dependency on synthetic inputs (including fertilisers and pesticides, industrial or imported)
		2	Efforts at efficient use of purchased inputs, relies on local sources of inputs where feasible	feed)Reduced waste/losses at harvesting, processing, storage, or post-harvest
		0	Uses purchased inputs to intensify production per unit land.	 Farm-saved seed (including seed banks and networks) On-farm fodder production Reduced on-farm or supply chain energy use Elimination of heavy, soil-damaging machinery
	Soil health	6	Deliberately and actively enhances soil health and functioning through explicit design for improving soil biological activity	Biological soil fertility measures
		4	Secures soil health and functioning, such as by deliberately managing organic matter	(including compost, manure, vermiculture, effective microorganisms)
		2	Aims to mitigate the loss of soil fertility and biological activity through discrete practices, such as fallow periods	 No till or minimum till Cover cropping, green manures, mulching or permanent ground cover Legumes for nitrogen fixation Monitoring of soil health / biological
		0	Does not focus on soil health and may use practices undermining soil health, singular focus on yields and productivity	activity to evaluate practices
	Animal health	6	Ensures highest standard of animal health and welfare, during entire life cycle with a focus on species-appropriate environment and locally adapted and resilient breeds.	 Adapted local breeds able to give birth without aid Consistent and regular outdoor
		4	Actively safeguards animal health and welfare beyond required standards and keeps animals in species-appropriate environment.	access for animals, natural environment for roaming • Free range poultry, fully grass-fed ruminants • Elimination or reduced use of
		2	Fully satisfies animal health and welfare standards. Practices non-intensive production.	antibiotics and growth hormones for livestock Natural medication wherever possible
		0	Confinement, tethering and restraint of animals, concentrated feedlot operations, overstocking, animal monocultures, exotic breeds, unnecessary medical practices and alterations, regular use of growth hormones and antibiotics, irresponsible slaughtering, or transport practices.	 Improved animal housing and sheds Safe and humane slaughtering and transport practices. Integrated pollinator management Fodder trees and crops

Dimension	HLPE principle	AE score	Spectrum of values	Indicators / examples of good practices
	Biodiversity	6	Deliberately and actively enhances biological diversity within production systems – from domesticated diversity (crops and animal races) and 'wild' diversity (soil microorganisms, plants, insects, birds, animals) to multi-habitat approaches (land use diversity at landscape level)	 Use of local, traditional, indigenous or 'orphan' crops, breeds, and varieties (animals, trees, crops, fish) In-field production diversity
		4	Explicitly recognizes value of biological diversity and manage production system with a view to maintain existing biodiversity	Encouraging of particular species (e.g., pollinators, pest predators, wild companion plants) through habitat management
		2	Neutral with respect to biodiversity and pragmatically focuses on managing production system for yield and labour minimization	Conservation of forest fragments around farms, conversion of field edges into woodlands Multi-habitat approaches (land use diversity at landscape level) Multi-year crop rotation
		0	Actively manages production system to limit diversity with a view to facilitate labour and production processes (e.g., monocultures for ease of mechanical harvesting)	Biological soil fertility measures No or low till
	Land and natural resource governance	6	Participatory and democratic multi-actor natural resource management at scale	 Community-based natural resource management Land tenure that respects traditional and customary land rights and ensure equitable and secure access
		4	Representative structures for land and natural resource governance, functioning customs and norms	to land for smallholders/ family farmers and peasant food producers Participatory land use planning, landscape design
		2	Partial collective forms of natural resource and land governance, partially functioning customs, and norms	 Participatory biosphere conservation and restoration, catchment management Control of inland and marine
		0	Promotion of private, individual forms of natural resource governance based on private property rights	water resources by coastal/fishing communities Improving the enabling policy environment for agroecology, sustainable land use and natural resource management
	Synergy	6	Deliberately and actively manages interactions amongst components within production systems (animals, crops, trees, soil, and water) to enhance complementarity and achieve synergy, including between production and conservation objectives across field, farm, and landscape scales (land sharing)	Guild and companion planting, intercropping non-crop plants for ecological functions Ecosystem services Polycultures and mixed farming (agroforestry, crop-tree-livestock-fish)
		4	Manages interactions amongst selected components within production systems	 integration) Cover cropping, green manures or permanent ground cover Manure and compost for soil fertility
		2	Neutral with respect to integrating or segregating components within production systems	 Legumes for nitrogen fixation Fodder trees and crops Rotational / regenerative grazing
		0	Actively segregates components within production systems to minimize labour and facilitate production processes, including intensification of production on higher potential land, leaving other land for meeting conservation objectives (land sparing)	Integrated pest management through habitat management Integrated landscape planning / territorial approach Climate change response through system redesign

Dimension	HLPE principle	AE score	Spectrum of values	Indicators / examples of good practices
Social justice and participation	Co-creation of knowledge	6	Actively supports and emphasizes the importance of local innovation, indigenous/traditional knowledge, farmer-to-farmer knowledge exchange, and consumer-producer deliberations	Farmer to farmer learning and exchanges including farmer field schools Farmer research and experimentation groups Co-innovation between farmers and researchers / participatory research Communities of practice on agroecology Traditional and indigenous knowledge Capacity building on climate and agroecology
		4	Emphasizes co-learning and the combination of local/indigenous/traditional and global scientific knowledge	
		2	Emphasizes widespread dissemination of innovations from participatory research	
		0	Emphasizes widespread dissemination of innovation from state and privately-funded formal research	
	Social values and diets	6	Recognizes inequalities within food systems and actively promotes and builds food systems based on the culture, identity, and tradition of local communities to provide healthy, diversified, seasonally and culturally appropriate diets	Right to food, farmers rights Promotion of food sovereignty Explicit and open discussion of structural inequalities and how to overcome them Gender equity and youth empowerment Culturally appropriate nutrition and dietary diversity Local seed and food fairs Valorisation of traditional and indigenous knowledge and practices Promotion of traditional and indigenous crops and diets Healthy and diversified diets Research into health-promoting qualities of traditional diets
		4	Refers to cultural traditions as means to promote healthy diet, recognises specific inequalities in the food system (e.g., gender) and tries to overcome them	
		2	Neutral with respect to cultural traditions or identities, inequality	
		0	Emphasizes the supremacy of science and markets to meet public health and nutrition goals over and above cultural traditions and culturally appropriate diets	
	Participation	6	Actively strives for greater food actor agency – i.e., participation of all food actors and wider civil society in decision-making about how food is produced, processed, stored, transported and consumed	Active participation of women, youth, indigenous and other marginalised groups in leadership and decision-making Participatory food system governance (including policy development, food councils) Multi-actor food system processes, communities of practice Democratic producer and community organisation Decentralised decision-making
		4	Recognizes the advantage of participatory processes to policy ownership and public consent, and supports these in certain contexts	
		2	Neutral with regard to participation – neither supports nor blocks participation	
		0	Sees participation as happening through the market (e.g., as consumer demand), may block participation as inefficient in certain contexts	
Economic fairness and participation	Economic diversification	6	Actively strive for greater economic diversity of production systems, to diversify on-farm income and value addition opportunities, as well as enable financial independence and autonomy	 Product diversification On-farm agro-processing and storage Farm-based or local bulk input production for distribution (seed, seedlings, trees, biofertilisers, biopesticides) Small enterprise development and support in agro-food value chains Farm-based non-agricultural activities (e.g. crafts, agri-tourism, eco-tourism, services) Women and youth-managed and -owned enterprises
		4	Manage economic diversity of production systems around functional thresholds to maintain ecosystem services and economic resilience	
		2	Neutral with respect to diversification or specialization	
		0	Specialize in a few components within production systems to simplify management and supply market requirements	

Dimension	HLPE principle	AE score	Spectrum of values	Indicators / examples of good practices
	Fairness	6	Emphasizes fairness and dignity of work for all, and actively supports dignified and robust livelihoods for all actors engaged in food systems, especially small-scale food producers	Decent jobs and working conditions in the agro-food system Living wages paid to workers, wage equality between workers Social mechanisms to reduce
		4	Emphasizes fair prices for products from smallholder farming	vulnerability Occupational health and safety provisions in place and acted on
		2	Pursues a pragmatic approach to labour, neutral with regards to conditions	Land redistribution Equitable access to natural resources Diverse ownership, including women and youth Fair trade and fair prices Equitable benefit sharing from genetic resources Fair treatment of intellectual property rights Equitable and collective ownership models
		0	Pursues financial returns through capital intensification, labour efficiency and streamlining, and exclusive intellectual property rights	
	Connectivity	6	Emphasizes and actively supports local markets, connectivity of producers and consumers, fair and short distribution networks, circular economy, workers' cooperatives, and solidarity networks (including, e.g., saving clubs, barter markets, community-supported agriculture schemes and participatory guarantee systems)	consumption Worker cooperatives, community-supported agriculture (CSA), participatory guarantee systems (PGS) Re-establishing connections between producers and consumers Access to markets emphasising short supply chains and local food webs Community restaurants, soup kitchens Encourage and sensitise for regional and seasonal demand Local food actor dialogues and networks (including producers, consumers, other supply chain actors, governance agents)
		4	Emphasizes a blended market approach combining access to national or global markets where appropriate with stimulating function of local markets	
		2	Pursues a pragmatic approach to commercialisation, neutral with respect to marketing or value chain structure	
		0	Emphasizes efficiency of large markets and global value chains, and actively links smallholders and producers' associations to large agribusiness	

Adapted from ongoing work by CIDSE / CAWR

Agroecology (AE) score:

0-2 - business as usual / sustainable intensification

4-6 - transformative agroecology

The score is meant to indicate where on the spectrum of approaches to sustainable food systems the particular project/initiative falls.

Indicators / examples: These are examples of the type of activities that may be present or absent and thereby indicate where on the spectrum the particular project/initiative falls.

References

AFDG. Abuja Declaration. https://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/africa-fertilizer-financing-mechanism/about-affm/abuja-declaration.

African Centre for Biodiversity. 2016. "Farm Input Subsidy Programmes (FISPs): A Benefit for, or the Betrayal of, SADC's Small-Scale Farmers?" https://www.acbio.org.za/wp-content/uploads/2016/07/Input-Subsidies-Report-ACBio.pdf

Anderson, C., Delvaux, F., Ahmed, F., Dauby, V. and Moeller, N. 2021. "Making money move for agroecology: Transforming development aid to support agroecology", Policy brief, CIDSE & CAWR.

Barrios *et al.*, 2020. Barrios, E., Gemmill-Herrenhttps, B., Bickslera A., Siliprandihttps, E., Brathwaitea, R., Mollera, S., Batelloe, C., Tittonellhttps, P. "The 10 Elements of Agroecology: enabling transitions towards sustainable agriculture and food systems through visual narratives". *Ecosystems and People* 2020, Vol. 16, No. 1, 230-247. https://doi.org/10.1080/26395916.2020.1808705 https://www.tandfonline.com/doi/epub/10.1080/26395916.2020.1808705?needAccess=true Open Access. Accessed 27 November 2021

Biovision 2019. "Agroecology Criteria Tool", https://www.agroecology-pool.org/methodology/

Biovision Foundation 2021. Biovision Foundation, 'Measuring Agroecology: a synopsis'. PowerPoint Presentation at the AE Donor Group WG on Tracking Funding. 24 March 2021.

Biovision Foundation for Ecological Development and IPES-Food. 2020. "Money Flows: What is holding back investment in agroecological research for Africa?" Biovision Foundation for Ecological Development / International Panel of Experts on Sustainable Food Systems.

CAFOD and RSBP. 2021. "Assessing UK aid for agriculture and land use", background report, https://www.rspb.org.uk/globalassets/downloads/documents/conservation--sustainability/supporting-analysis-harnessing-the-potential-of-agriculture-for-people-and-nature-the-role-of-uk-aid.pdf

CAFOD and RSBP. 2021a. "Harnessing the potential of agriculture for people and nature: the role of UK aid", *Policy brief*, CAFOD/RSBP

Chiriac, D. and Naran, B. 2020. "Examining the climate finance gap for small-scale agriculture", Climate Policy Initiative/IFAD.

CIDSE 2020. "Financing for Agroecology: More than just a dream? An assessment of European and international institutions' contributions to food system transformation". *Policy briefing*, CIDSE.

Danish Church Aid (DCA). 2020. "Sustainability starts from the ground". Danish Church Aid, Copenhagen.

DeLonge, M., Miles, A. and Carlisle, L. 2016. "Investing in the transition to sustainable agriculture", *Environmental Science and Policy*, 55, pp.266-273

FAO. 2022. Agroecology Knowledge Hub Webpage. https://www.fao.org/agroecology/overview/en/ (Accessed May 2022)

FAO. 2018. Food and Agriculture Organisation (FAO). 2018. "The 10 elements of agroecology: Guiding the transition to sustainable food and agricultural systems". FAO, Rome. https://www.fao.org/3/i9037en/i9037en.pdf

FAO, UNDP, and UNEP. 2021. "A multi-billion-dollar opportunity – Repurposing agricultural support to transform food systems", https://www.fao.org/documents/card/en/c/cb6562en

Gliessman, S. 2016. "Transforming food systems with agroecology", Agroecology and Sustainable Food Systems, 40:3, 187-189

Government of Zimbabwe. 2020. "2021 National Budget Statement", presented to Parliament, November 26. Government of Zimbabwe, Harare.

Guèdègbé, T. and Doukkali,M.R. 2018. Fertilizer Use in Africa: A Price Issue. OCP Policy Center. PB-18/27. https://www.policycenter.ma/sites/default/files/2021-01/OCPPC-PB1827-ENG.pdf

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. http://www.fao.org/3/ca5602en/ca5602en.pdf

IFAD. 2017. The Field Report. https://www.ifad.org/thefieldreport/

Lowder et al, 2021. Lowder, S.K., Sánchez, M. V., Bertini, R. "Which farms feed the world and has farmland become more concentrated?", https://doi.org/10.1016/j.worlddev.2021.105455

Moeller, N. 2020. "Analysis of Funding Flows to Agroecology: the case of European Union monetary flows to the United Nations' Rome-based agencies and the case of the Green Climate Fund". CIDSE & CAWR.

Mdyetseni, H., Nyirongo, G. and Kafunda, A. 2022. "Analysis of the 2022/23 draft National Budget focusing on agriculture", PSA Alliance, Action Aid and NASFAM, Lilongwe.

Muchero, M. 2022. "Financing for agroecology in Zimbabwe", PSA Alliance/Action Aid, Harare.

Olivera, R. and Popusoi, D. 2021. "Stock-take report on agroecology in IFAD operations: An integrated approach to sustainable food systems", IFAD.

NEPAD. 2011. Seventh Progress Report. January-December 2010. Implementation of the Abuja Declaration on Fertilizer for an African Green Revolution. https://www.inter-reseaux.org/wp-content/uploads/Seventh_Progress_Report_Abuja_Declaration_FINAL_June_2011.pdf

Pimbert, M. and Moeller, N. 2018. "Absent Agroecology Aid: UK agricultural development assistance since 2010", Sustainability, 10, 505; doi:10.3390/su10020505

Saarinen, H. and Godfrey, C. 2019. "Accountability Deficit? Assessing the effectiveness of private finance blending in ensuring that small-scale farmers are not left behind", Oxfam Briefing, Oxfam, Oxford.

Savvidou, G., Atteridge, A., Omari-Motsumi, K. and Trisos, C.H. 2021. "Quantifying international public finance for climate change adaptation in Africa", Climate Policy, 21:8, pp.1020-1036

Schüller, S. 2019. "Unlocking public finance for agroecology: Catalysing the potential of agriculture in achieving the Sustainable Development Goals". Both ENDS, Amsterdam.

Shakhovskoy, M., Colina, C. and Höök, M. 2019. "Pathways to Prosperity: Rural and agricultural finance state of the sector report", Feed the Future / Mastercard Foundation / Small Foundation.

Sinclair, F., Wezel, A., Mbow, C., Chomba, S., Robiglio, V. and Harrison, R. 2019. The Contribution of Agroecological Approaches to Realizing Climate-Resilient Agriculture. Global Commission on Adaptation. https://gca.org/wp-content/uploads/2020/12/TheContributionsOfAgroecologicalApproaches.pdf

Vermeylen, M. and De Schutter, O. 2020. "The share of agroecology in Belgian overseas development assistance: An opportunity missed", CRIDHO Working Paper 2020/3, Institute for Interdisciplinary Research in Legal Sciences (JUR-I), University of Louvain

Wezel, A., Herren, B., Bezner Kerr, R., Barrios, E., Goncalves, A. and Sinclair, F. 2020. "Agroecological principles and elements and their implications for transitioning to sustainable food systems. A review", *Agronomy for Sustainable Development*, 40:40 https://doi.org/10.1007/s13593-020-00646-z

World Bank. 2019. "Zimbabwe public expenditure review with a focus on agriculture". World Bank, Washington DC.



The Partnership for Social Accountability (PSA) Alliance is a consortium of organisations working to strengthen social accountability in health and agriculture across Southern Africa. The consortium consists of ActionAid; PSAM – Public Service Accountability Monitor of Rhodes University; SAfAIDS; and ESAFF – Eastern and Southern Africa Small Scale Farmers' Forum. The PSA Alliance is supported by the Swiss Agency for Development and Cooperation (SDC). For more information visit http://copsam.com/psa/, or email psaalliance@actionaid.org. To follow the PSA Alliance on Twitter or Facebook – see @PSAAlliance.

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 $\hbox{Cover Photo: A farmer in her sorghum field in Mbire district, Zimbabwe. CREDIT: ACTIONAID } \\$

