Food and Agriculture Organization of the United Nations

SUSTAINABLE DEVELOPMENT GOALS

working for Zero Hunger

REU SDG Internal workshop

FAO tools to support SDGs implementation in the agriculture sector

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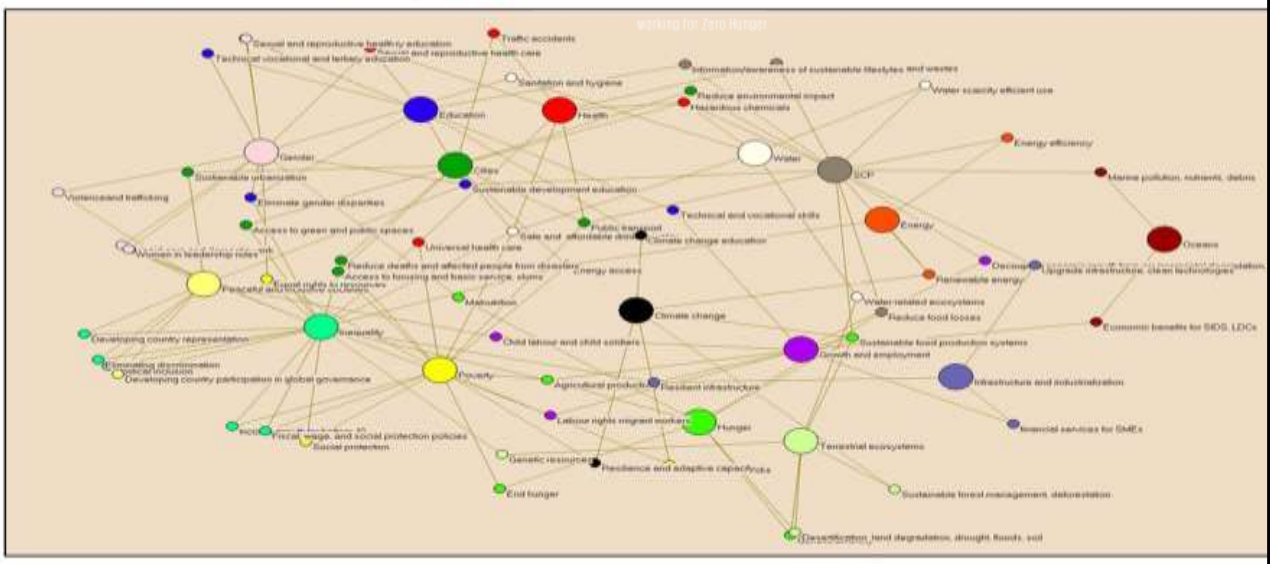
Food and Agriculture Organization of the United Nations

The 5 SFA Principles adopted by FAO Member

Food and Agriculture: A confluence of pressures

- Population increases and requires more and better food, energy, agricultural products
- Poverty, inequality, hunger and malnutrition
- Climate change and volatile food prices affect vulnerable people, particularly in rural areas
- Biodiversity is under threat
- Natural resources are exploited, degraded

Annex 1. SDGs as interlinked system



Source: David Le Blanc (2015), "Towards Integration at Last? The SDGs as a Network of Targets", DESA Working Paper No. 141.

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Structure

- **HOW:** 12 steps to engage food and agriculture in the SDGs
- **WHAT:** 20 Actions
- Tracking progress
- FAO Policy support tools
- Mapping actions to SDGs

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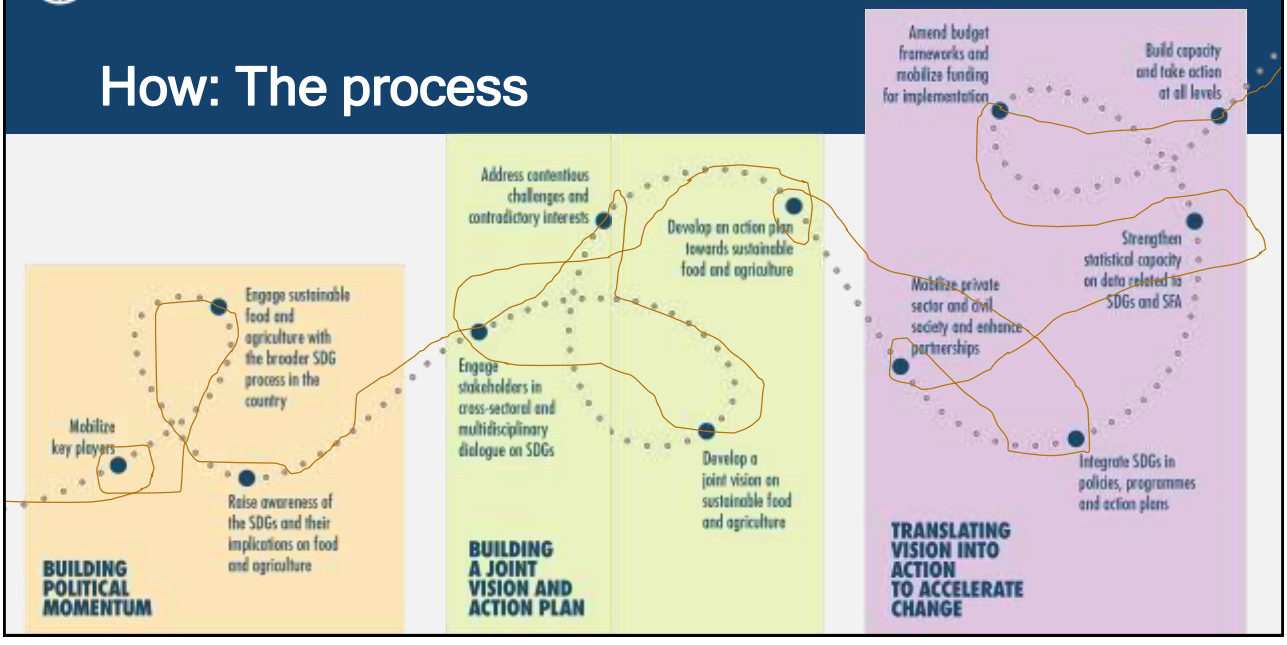
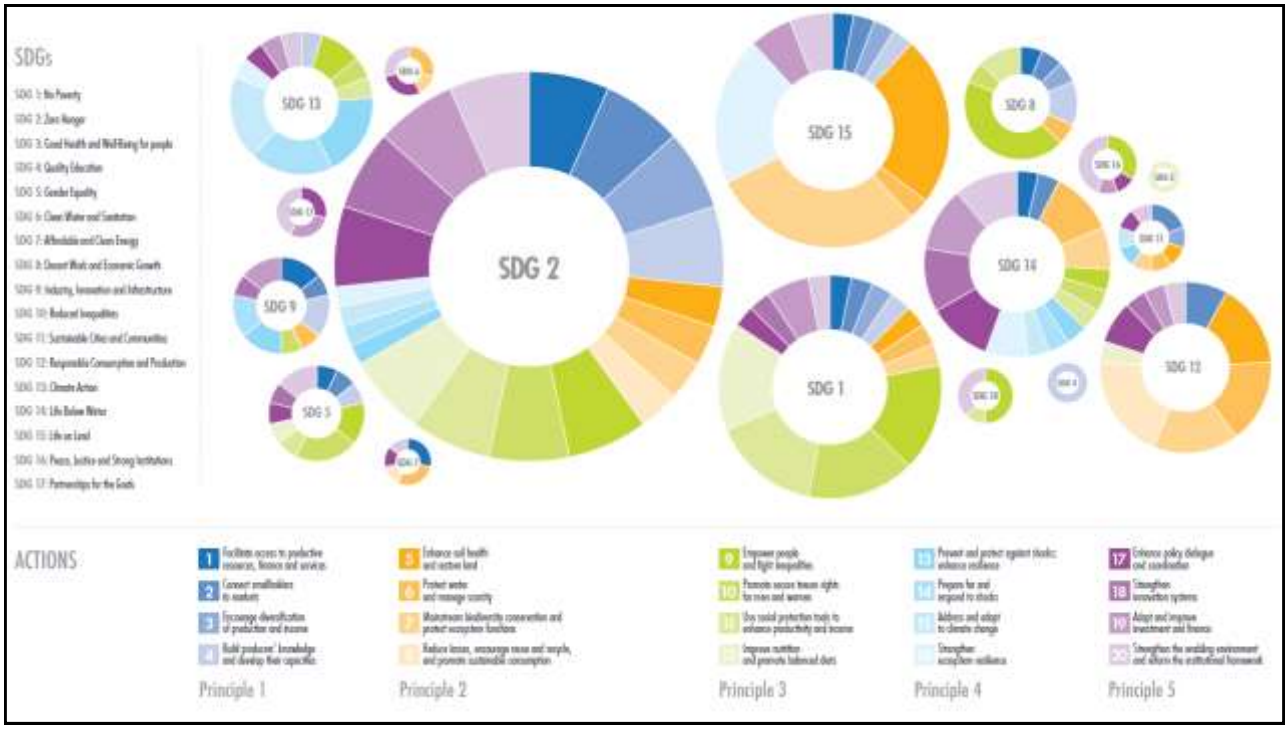
How: The process



20 interconnected actions to guide decision-makers



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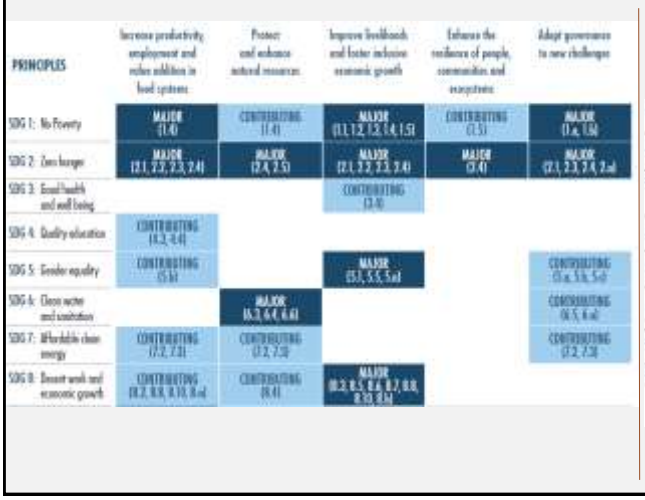
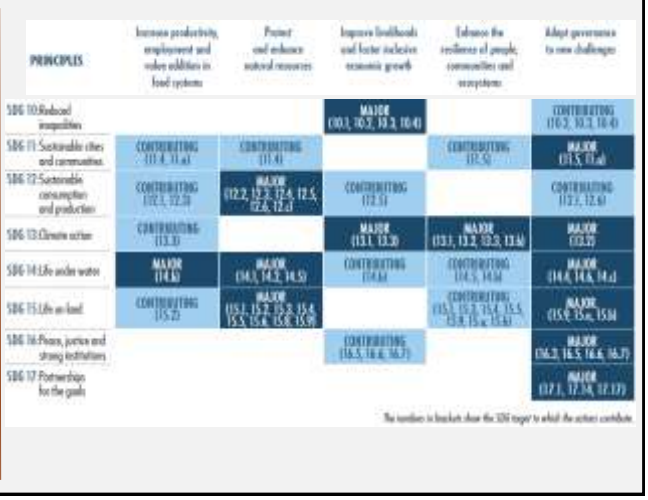
Mapping actions to SDGs





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What: The 20 Actions

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17. Enhance **policy dialogue** and **coordination**
18. Strengthen **innovation systems**
19. Adapt and improve **investment** and **finance**
20. Strengthen the **enabling environment** and reform the **institutional framework**

4 Build producers' knowledge and develop their capacities

CONTRIBUTES TO SDGs:

Sharing knowledge, building capacities and investing in innovative technology are all part of the transformation to sustainable food and agriculture systems. But recent years have witnessed a significant shift in the way of extending knowledge. Top–down and technology–oriented systems are progressively being replaced by integrated, market–oriented and farmer–driven methods, often involving multistakeholder participatory processes. Smallholder family farmers, rural women and men, and their organizations are increasingly regarded as full partners in situation–analysis and problem–identification, and in redefining research and advisory services. The trend sees increasingly pluralistic extension systems where public sector, private agents, civil society organizations and non–governmental organizations all deliver knowledge to farmers based on their areas of expertise.

Participation in modern value chains that trade crops within or across country borders requires business–oriented approaches that include a set of skills in managing the farm both at the production as well as the marketing stages.

While supporting the formation of producer organisations to provide services and give a voice to farmers' concerns, countries need to play a greater role as coordinator and regulator to ensure that services offered by the increasing number of actors in the field of knowledge are:

- Feasible, technically sound and balanced sustainably with issues of resilience, access to markets and social inclusiveness in mind.
- Targeted, demand–driven, engage women and youth, and address the specific needs of different categories of producers, while ensuring reach to those most left behind.

To generate better jobs and more decent work opportunities, knowledge–sharing and innovation in rural areas should focus on developing capacities, supported by:

- Bringing farmers' knowledge together through farmer field schools that promote agro–ecosystem agriculture techniques, strengthening the understanding and awareness on the prospects for rural employment in the context of greener food systems.
- Going beyond agriculture to provide youth with training and education on sustainable socio–economic entrepreneurship, including human skills and linking agriculture to industry and services.

THE FARMER FIELD SCHOOL APPROACH HAS BEEN USED IN CLOSE TO 100 COUNTRIES

TOOLKIT

Global Farmer Field Schools Platform
www.fao.org/farmer-field-schools

FAO Research and Extension Portal
www.fao.org/research-and-extension

A decision guide for rural advisory methods
www.fao.org/3/a-i4141e.pdf

FAO Capacity Development Portal
www.fao.org/capacity-development

FAO capacity development learning courses
www.fao.org/capacity-development/resources/fao-learning-moteed/learning-courses

Optimization of topics (resilience)

Formal non formal

Research and innovation

IT an other methods

19 Adapt and improve investment and finance

CONTRIBUTES TO SDGs:

Building support for policies that promote rural transformation involves making the case for how investment in sustainable food and agriculture production systems can materially contribute to broader national objectives.

Evidence from many countries shows that public investment in agricultural R&D, education and access to information for producers and in rural infrastructure yields much higher returns than other expenditures, such as input subsidies. Already, producers, including smallholders, are the foremost investors in agriculture despite the fact that smallholders often face specific constraints including poverty, lack of or insecure access to land, poor access to markets and financial services.

Ensuring a level playing field between smallholders and larger investors is important for both equity and economic efficiency reasons.

- Increase investment in rural infrastructure. Unlocking the agricultural potential of an area through public investment in basic infrastructure such as roads, water control or markets provides an incentive for farmers to invest more in their production. Beyond improving farmers' incomes, this generates on– and off–farm employment and contributes to strengthening local economies.

- Explore and exploit new opportunities for inclusive agricultural and rural finance. Inclusive financing can foster agribusiness development by easing liquidity constraints faced by many farmers. A whole range of innovative approaches to rural finance and forms of investment are now available, such as agricultural investment funds, investment promotion, guarantee funds and ICT, to increase the level of financing while lowering the risks to investors.
- Interventions to improve access to credit should also promote financial literacy and management skills, in addition to producer organisations or community–based savings and loan groups, which allow for better risk management and improved access to finance from the formal banking sector.
- Different incentives can be used at various stages to address short– and long–term changes. This might be a combination of positive incentives, such as training, direct payments and compensation for land set aside or improved market access with regulatory instruments, such as prohibition of use, fines and taxes.

TOOLKIT

Investment Learning Platform
www.fao.org/investment-learning-platform/home

Agricultural Investment Funds for Development
www.fao.org/3/i8226en/I8226EN.pdf

Ending poverty and hunger by investing in agriculture and rural areas
www.fao.org/3/a-i7516e.pdf

Rural invest
A tool for project design
www.fao.org/support-to-investment/knowledge-resources/learning-tools/ruralinvest

Portal on incentives for ecosystem services
www.fao.org/ecosystem-services-biodiversity/incentives

Building the case ag to sdgs

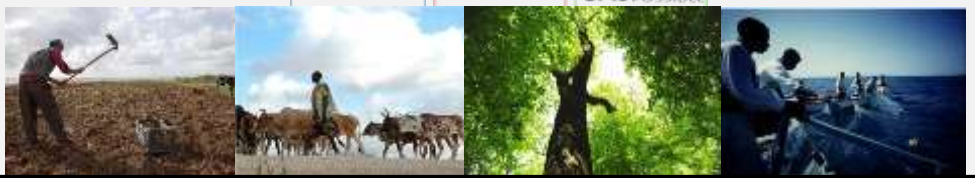
Type -> subsidies v capacity

Infrastructure, roads etc.

Payment ecosystem services

Examples of SDG integration into the agriculture sector - CSA

Climate Smart Agriculture



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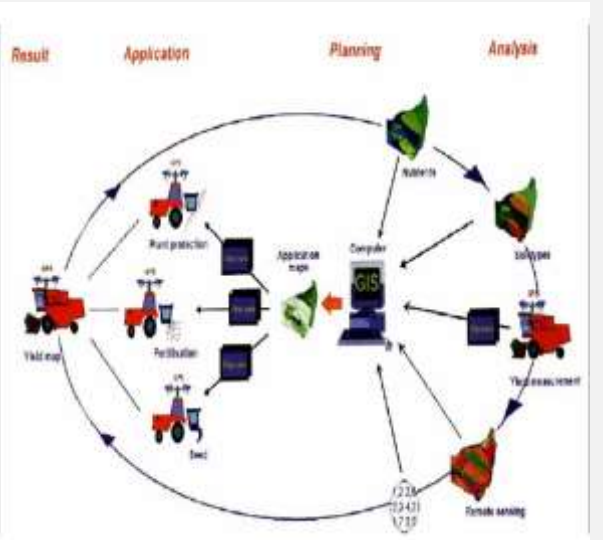
A GLOBAL APPROACH WITH LOCALLY APPROPRIATE ACTIONS

- CSA **is not** an agricultural practice or system *per se*
- CSA is **location-specific**
- CSA applies **across scales**
- CSA is **cross-sectoral**



CSA SOURCEBOOK

Section A

1. Concept and scope
2. Landscape approach

Section B

3. Farming practices
4. Farming systems
5. Food chains

Section C

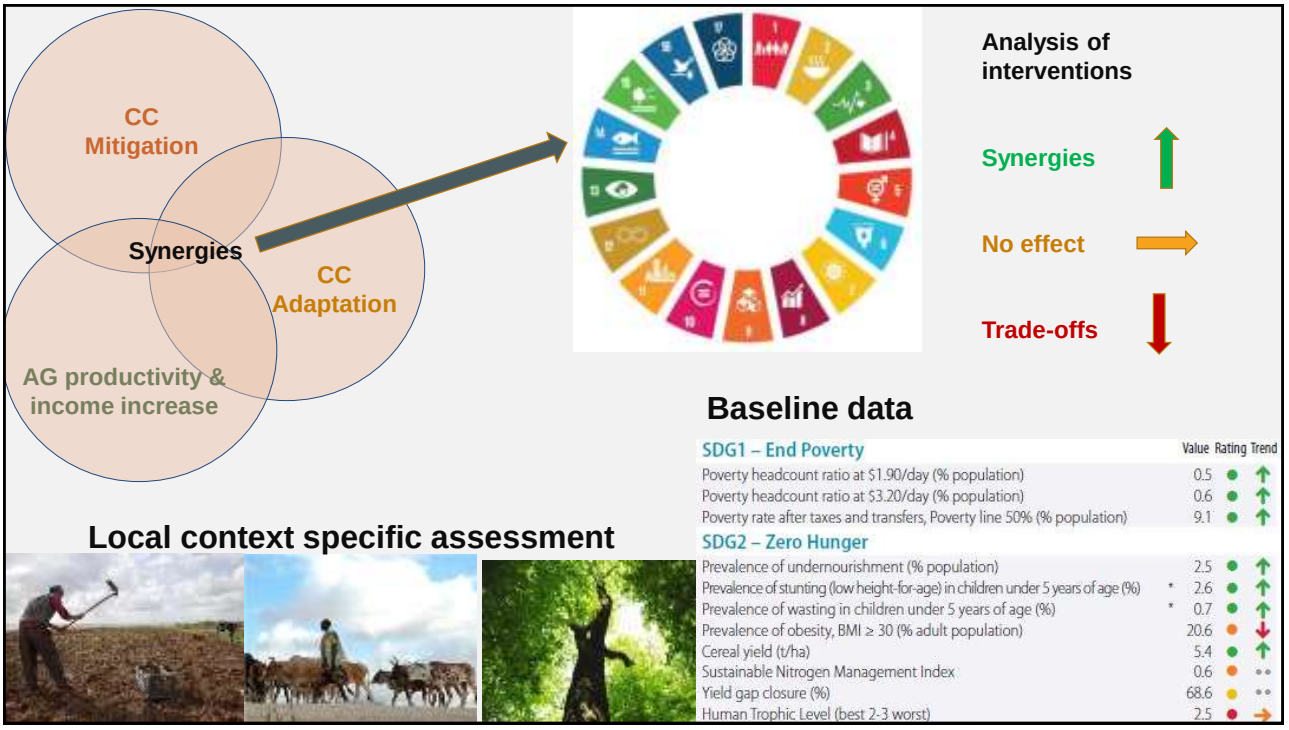
6. Institutions
7. Policy
8. Finance
9. DRR
10. Safety nets
11. Capacity development
12. Assessment

AUDIENCE

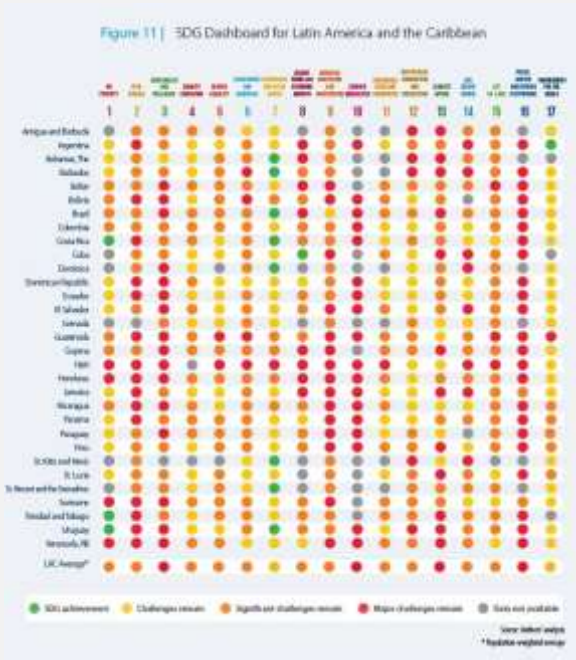
PLANNERS

PRATICTIONERS

POLICY MAKERS


CC
Mitigation
Synergies
CC
Adaptation
AG productivity &
income increase
Analysis of
interventions
Synergies
No effect
Trade-offs
Local context specific assessment
Baseline data
SDG1 – End Poverty
Value Rating Trend
Poverty headcount ratio at $1.90/day (% population) 0.5
Poverty headcount ratio at $3.20/day (% population) 0.6
Poverty rate after taxes and transfers, Poverty line 50% (% population) 9.1
SDG2 – Zero Hunger
Prevalence of undernourishment (% population) 2.5
Prevalence of stunting (low height-for-age) in children under 5 years of age (%) * 2.6
Prevalence of wasting in children under 5 years of age (%) * 0.7
Prevalence of obesity, BMI ≥ 30 (% adult population) 20.6
Cereal yield (t/ha) 5.4
Sustainable Nitrogen Management Index 0.6
Yield gap closure (%) 68.6
Human Trophic Level (best 2-3 worst) 2.5


SWEDEN
OECD Countries
OVERALL PERFORMANCE
Index score
Regional average score
84.8
77.3
SDG Global rank 1 (OF 162)
Sweden
AVERAGE PERFORMANCE BY SDG
CURRENT ASSESSMENT – SDG DASHBOARD
SUSTAINABLE DEVELOPMENT REPORT 2019
Transformations to achieve the Sustainable Development Goals
Includes the SDG Index and Dashboards



RICE PRODUCTION SYSTEM

Alternate wetting and drying in irrigated rice

- Reduce methane emissions by 48%
- No fish system
- Reduce water use up to 30%
- Biodiversity ecosystem loss
- Lower energy use
- Drought issues
- Less mosquitos reduced disease

FERTILIZER DEEP PLACEMENT

Production of briquettes

Increase yield by 18 percent

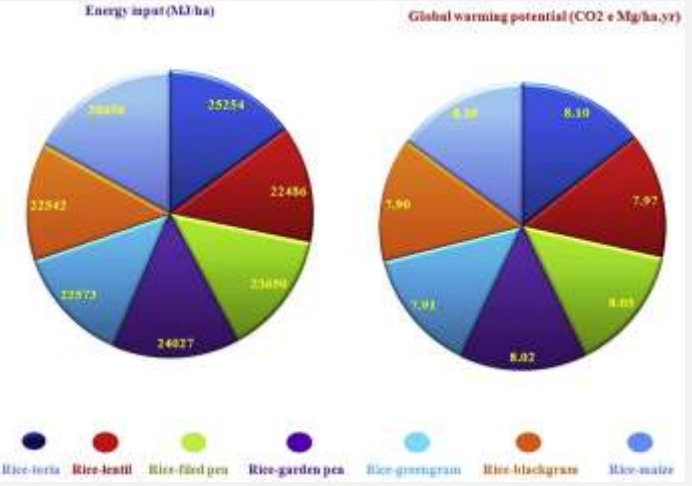
More labor intensive (woman)

Reduced fertilizer use by 1/3

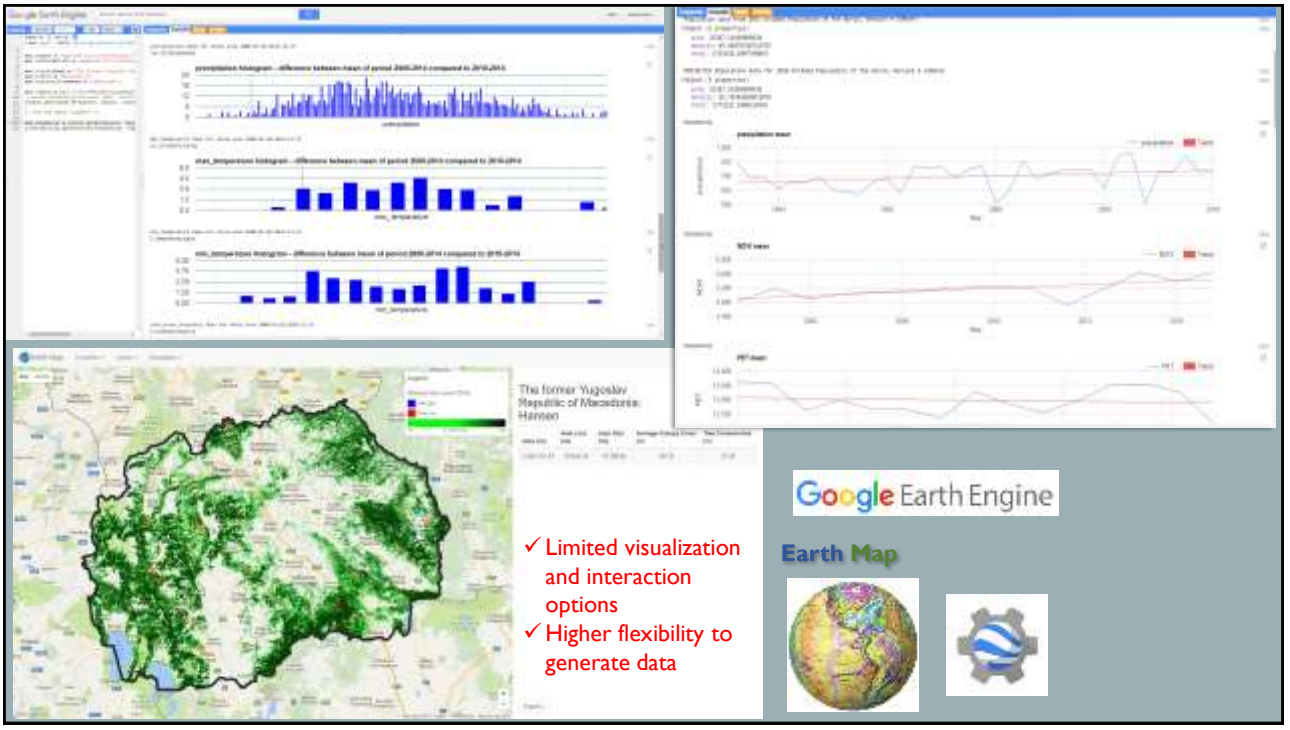
Less water contamination

Woman set-ups

CROP DIVERSIFICATION IN RICE SYSTEMS



Reduced inputs, nutrition balance improvements, market access or value?



SDG TARGET FINAL BACK CHECK

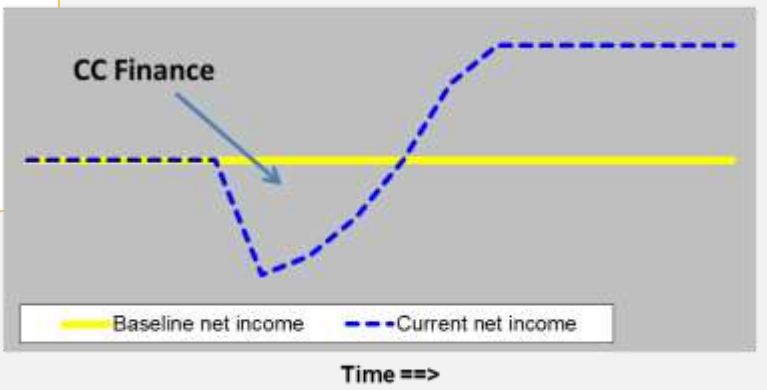
SDG1 – End Poverty		Value	Rating	Trend
Poverty headcount ratio at $1.90/day (% population)		0.5	●	↑
Poverty headcount ratio at $3.20/day (% population)		0.6	●	↑
Poverty rate after taxes and transfers, Poverty line 50% (% population)		9.1	●	↑
SDG2 – Zero Hunger				
Prevalence of undernourishment (% population)		2.5	●	↑
Prevalence of stunting (low height-for-age) in children under 5 years of age (%)	*	2.6	●	↑
Prevalence of wasting in children under 5 years of age (%)	*	0.7	●	↑
Prevalence of obesity, BMI ≥ 30 (% adult population)		20.6	●	↓
Cereal yield (t/ha)		5.4	●	↑
Sustainable Nitrogen Management Index		0.6	●	••
Yield gap closure (%)		68.6	●	••
Human Trophic Level (best 2-3 worst)		2.5	●	→

Linking CC finance to overcome agriculture investment barriers

Local contexts -> to national policy

Stakeholder: youth, woman, mot poor, indigenous, etc.

Investment Barrier to Adoption



THANK YOU

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www.fao.org/sustainability