



for

Agrifood Systems

Module 6

Services for innovation



ValueLinks for Agrifood Systems

Framework

1 Scope of transformation

Analysis & Strategy

2 Agrifood system analysis

3 Transformative strategy

Transformative Actions Menu

4 Green & social business models

5 Reliable & fair business linkages

6 Services for innovation

7 Financing and insurance

8 Nutritious food and standards

9 Policies for AFS transformation



Module 6 Services for innovation

01 Operational services

02 Support services for AFS transformation

03 Entrepreneurship training: capacities to transform AFS



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According to you,

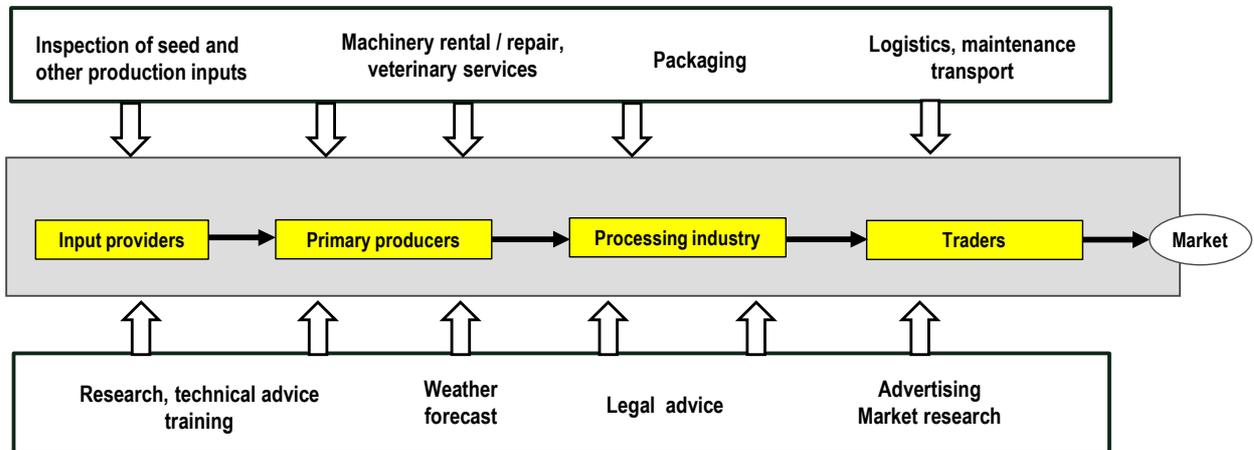
What type of services are key for enterprises to contribute to the transformation of Agrifood systems?



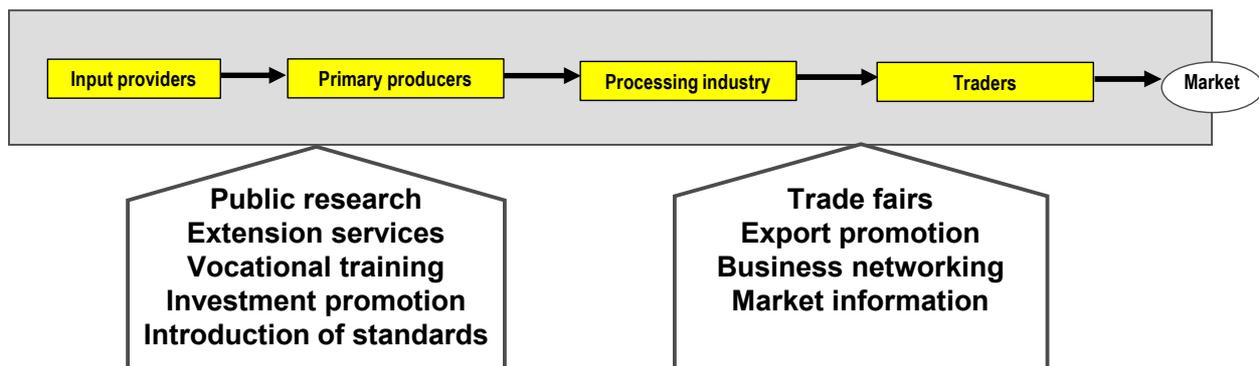
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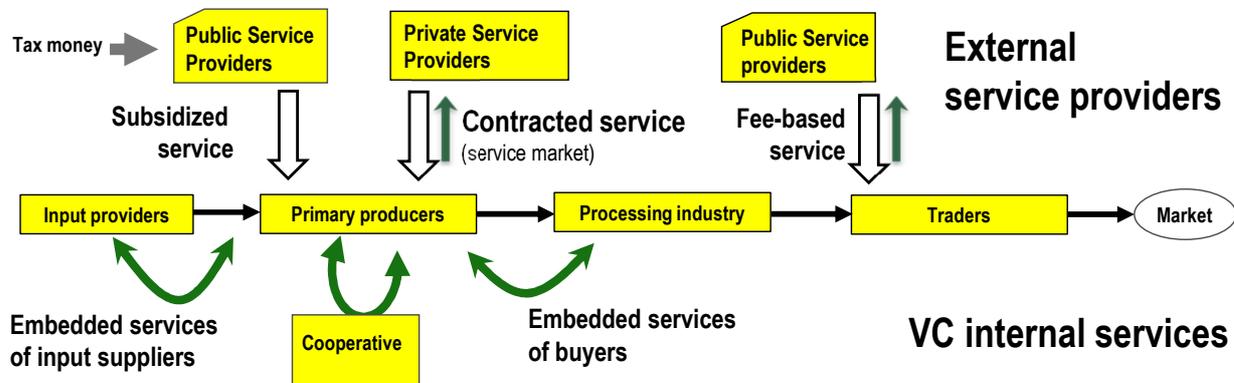
Operational Services for enterprises to run their business



Support Services to benefit operators collectively



Operational Services – Modes of Delivery

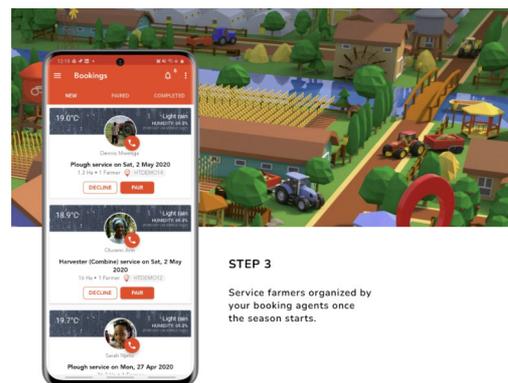


Mechanization services for efficiency and employment

[Hello Tractor | Growing Together](#)

Network of equipment dealers, financial institutions, equipment owners

- Rental of tractors to farmers via digital booking App & booking agents
- Tractor finance program
- Procurement of machinery
- Training of tractor owners / service providers
- New rural jobs: Booking agents



<https://hellotractor.com/>



Climate smart operational services

- Digital services e.g. for precision farming, access to information
- Fee-based services, e.g. Smart-Irrigation-as-a-Service
- Embedded service provision in contract farming e.g. inputs, weather forecast, safe housing, crop insurance
- Coordination of carbon sequestration projects Certification & trade of claims



[Smart Drip Irrigation System using IoT | Automate Irrigation Systems | Netafim India Blog](#)

[Netafim Services: Enhancing Agricultural Productivity Using Irrigation Facilities \(netafimindia.com\)](#)



High potential for Development Partnerships with the Private Sector to introduce service innovations



Digital weather forecast: good for yields, income & environment

Daily individual weather forecast for farms in the tropics Brazil, West Africa
as SMS without relying on the internet, High resolution: radius of approx. 9 km including warning extreme weather events

ignitia

API* solutions for aggregation of weather data (e.g. cooperatives, outgrower schemes)

2 million clients worldwide

- Savings on seed, crop nutrition and inputs due to optimized timing of application
- Less pollution by washed-away chemical inputs
- Reduced labour cost, machine wear and use of fuel
- Yields increased by up to 30 percent for food and other crops
- More income from crops reported by 87% of farmers using Ignitia

**Relevant for Carbon performance modelling,
Risk modelling for credit and insurance product design**



<https://ignitia.se>

* API: Application Programming Interface enabling communication between Apps



Module 6 Services for innovation

01 Operational services

02 Support services for AFS transformation

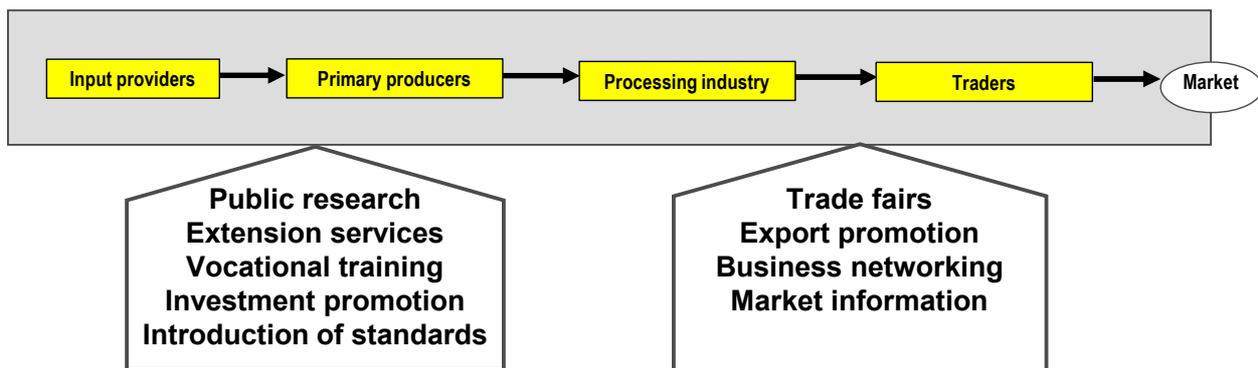
03 Entrepreneurship training: capacities to transform AFS



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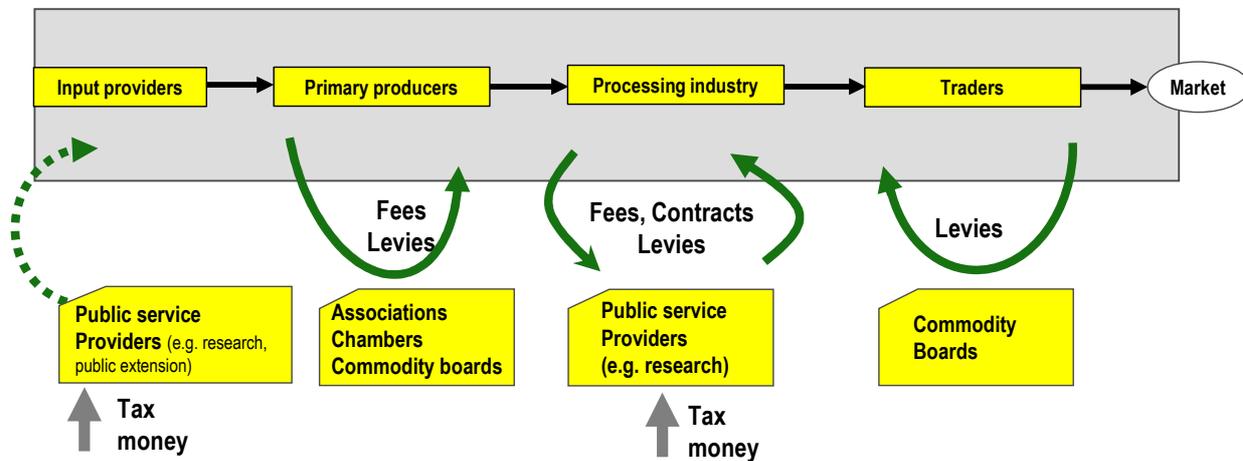
Support Services to benefit operators collectively



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Support Services – Modes of Delivery



Climate smart support services

- Research and development of varieties tolerant to climate change related stress
- Early warning systems on extreme weather events
- Climate change information system
- Extension services imparting agroecological good agricultural practice (GAP) that are climate smart at the same time



Climate information services for agriculture

1. Analysis of Demand

- Who needs which climate information, e.g. on rain, wind, hazards, diseases, climate change?
- Short-term / long-term forecasts
- Spatial resolution needed

Issues

- Technology for access
- Constraints for use
- Willingness-to-pay
- Subsidies

2. Analysis of Supply

- Information that is already provided by private or public providers

Issues

- How reliable are the data?
- Number of subscribers, their degree of satisfaction
- communication technologies
- Outreach
- Key partners Mobile phone providers, Geographic / meteorology institutes, extensionn

3. Some conclusions

- Involve clients / users, key partners, other stakeholders on solutions & outreach

Weather forecast (daily)

- Can be made commercial

Climate forecast (medium/ long term)

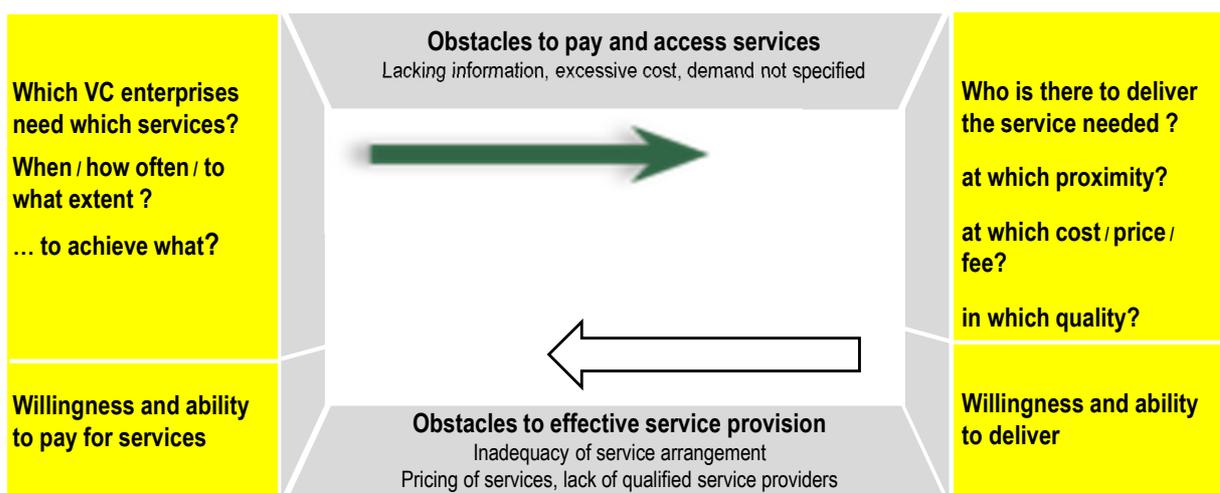
- Most likely fully subsidized
- Stakeholder dialogue on results, implications & changes

Early warning systems (ad hoc)

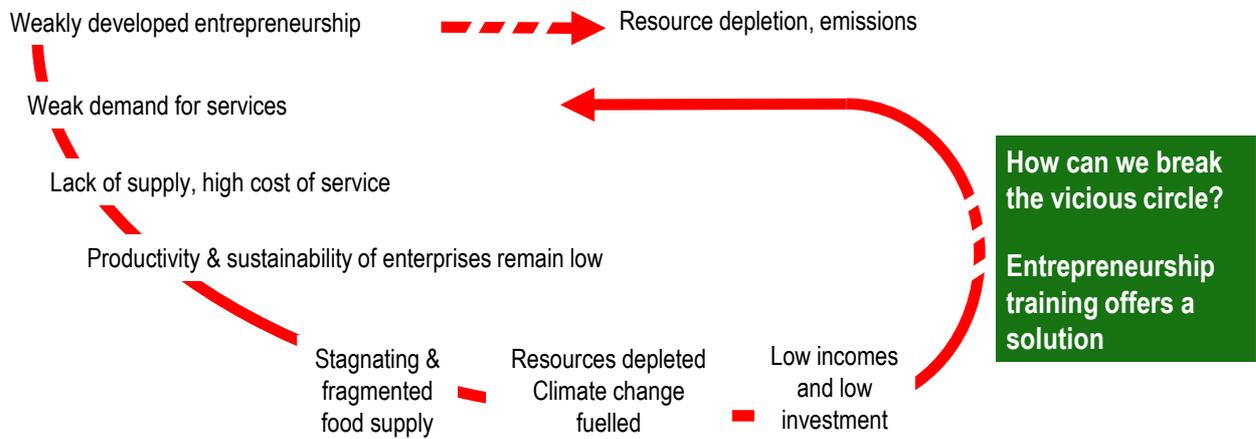
- Alliances with relevant institutions, other supporters
→ capacity building & financing



Service needs and demand vs. actual service supply



Weak entrepreneurship, weak demand for services



Module 6 Services for innovation

01 Operational services – modes of delivery

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Entrepreneurship trainings

SIYB "Start and Improve your business". [learn more](#)

EMPRETEC, UNCTAD entrepreneurship training for inclusive & sustainable growth of MSME (500'000 MSME trained)...

Farmer Business School (FBS) for large outreach to smallholders, incl. food crops & healthy nutrition

FBS Climate includes climate change related issues and technologies

CBS (Cooperative Business School) to strengthen service delivery of cooperatives incl. youth involvement

PBS (Processor Business School) to promote quality, MSME's incomes and investments in processing

ABS (Aquacultural Business School) to promote productivity, incomes, and sustainable resource use in aquaculture and protein production

Agriculture as business : self-guided e-learning from key concepts to investments and financing

GmBS plus (Gender makes Business sense) gender transformative entrepreneurship training

iCF (Inclusive Contract Farming) [>> overview](#)

SME business loop: Basic business skills training & coaching for small enterprises

BUS: Specialized training modules targeting ME agripreneurs [>> article](#)

developed by
GIZ & partners
[>> factsheets](#)



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Key features of Farmer Business School

Planning, business & investment skills for MSME in agriculture

Healthy nutrition and production of healthy food integrated

150 curricula for different food production systems in 25 countries

> 1.9 million agricultural MSME (35% women) trained since 2010

Support from BMZ, WCF, Bill & Melinda Gates Foundation, NIRSAL, EU, OACP, national public & private partners

Design by GIZ & African partners

- >5,000 MSME target outreach; Cost 8 to 16 \$/person trained
- 5 subsequent mornings hosted by village/community or cooperatives
- Each graduate receives training notebook, application templates & certificate
- Strict ToT qualification system; well-animated & participatory adult learning
- Follow up by extension on GAP & Cooperative Business School training

FBS: 1 Lead product



plus 2 food products

[>> factsheets](#)



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Implemented by giz

Farmer Business School What is it about?



M3 Manage your farm for enough food



M4 Money-out/Money-in: Know whether you do good business



M5 Decisions for more income



M6 Seize opportunities to diversify your farm enterprises



M7 Manage your money throughout the year



M8 How to get good financial services



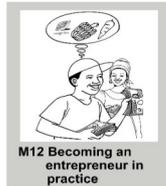
M9 Make more money with quality cocoa



M10 Benefits from membership in farmer organizations



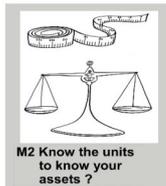
M11 Investing in planting or replanting of cocoa



M12 Becoming an entrepreneur in practice



M1 Is farming a business?



M2 Know the units to know your assets?

Outcomes & Impacts

Up to 106 % yield increase of food products

More diversified diets
HDDS from 6. to 7, IDDS from 4 to 4.5

Higher (real) income
from food products for domestic and products for global markets

Training cost 14 to 28 USD per MSME for GAP, FBS & nutrition

Multi-annual Cost-Benefit Ratios 1:20 to 1:28

Incubation of formally registered cooperatives and cooperative unions



Learning on healthy nutrition

Internet videos



"What if I told you that your banga soup is a sea of oil packed with excess fat and calories you don't need?"

[Hidden calories and fat in banga soup | African nutrition \(youtube.com\)](https://www.youtube.com/watch?v=...)

E-learning: basic & advanced (trainers)

[Course: Healthy nutrition | atingi](#)

As part of rural entrepreneurship trainings

The grid contains 12 modules (M1-M12) and logos for German Cooperation, World Cocoa Foundation, European Union, GIZ, and NIRSAL. Two boxes on the right indicate 'Nutrition tackled explicitly' (covering M1-M7) and 'Nutrition tackled implicitly' (covering M8-M12).

[Agri-Business Facility for Africa Factsheets](#)



Key features of Cooperative Business School

- Fee-based operational and technical services for members
- Planning & organization with members
- Economics of services & investments
- Strategic and Financial Management
- International & country specific framework of Cooperatives
- Youth employment

Over 19,300 managers and members from more than 3,000 producer organizations trained since 2016

Design by GIZ & African partners in 2016 with support BMZ, European Union and OACPS. Integrating Youth Employment in 2019 with support from Program Rural Employment



Outcomes & impacts

Better quality, higher product prices
 New buyers & off-taking agreements
 Group sales more than doubled

Cheaper quality inputs
 Diversified services

Mergers of cooperatives
 More members
 Access to loans

[>> Factsheets](#)

