Commercialisation of agriculture

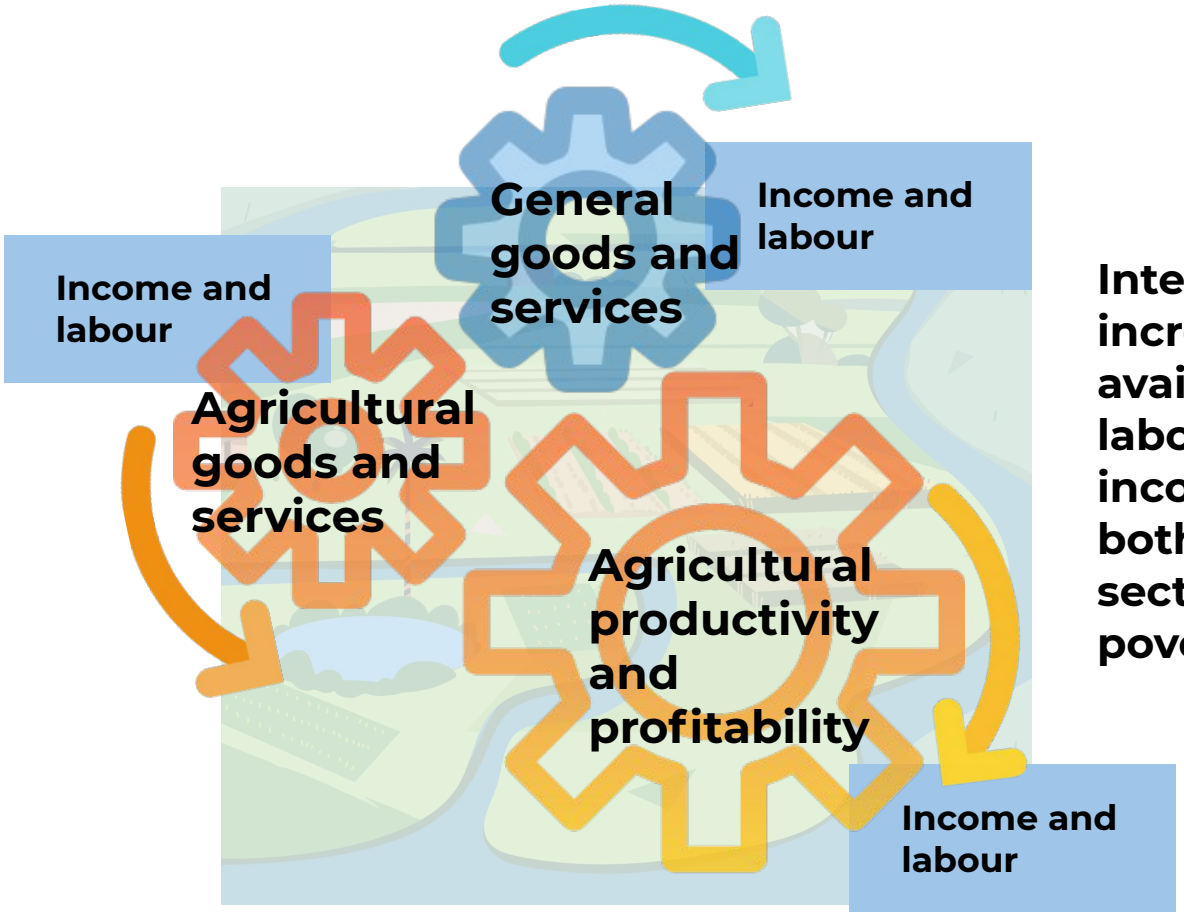
Improved water management driving reductions in poverty

Context: agriculture in coastal Bangladesh

The Blue Gold Program (BGP) works in the polders of Bangladesh.

This coastal zone is disaster-prone, and highly vulnerable to environmental challenges, including floods, waterlogging, salinity, fresh water scarcity, and drought.

- Agriculture and fisheries production are the backbone of the polder economy, constituting 60-70% of household incomes.
- Adverse climate and water conditions are at the root of low agricultural productivity and profitability, and have many households oscillating in and out of poverty.



Intensification of production increases the return on available assets, land, and labour. It leads to additional income and employment in both farming and non-farming sectors, and ultimately reduces poverty.

6% increase in
non-farm incomes

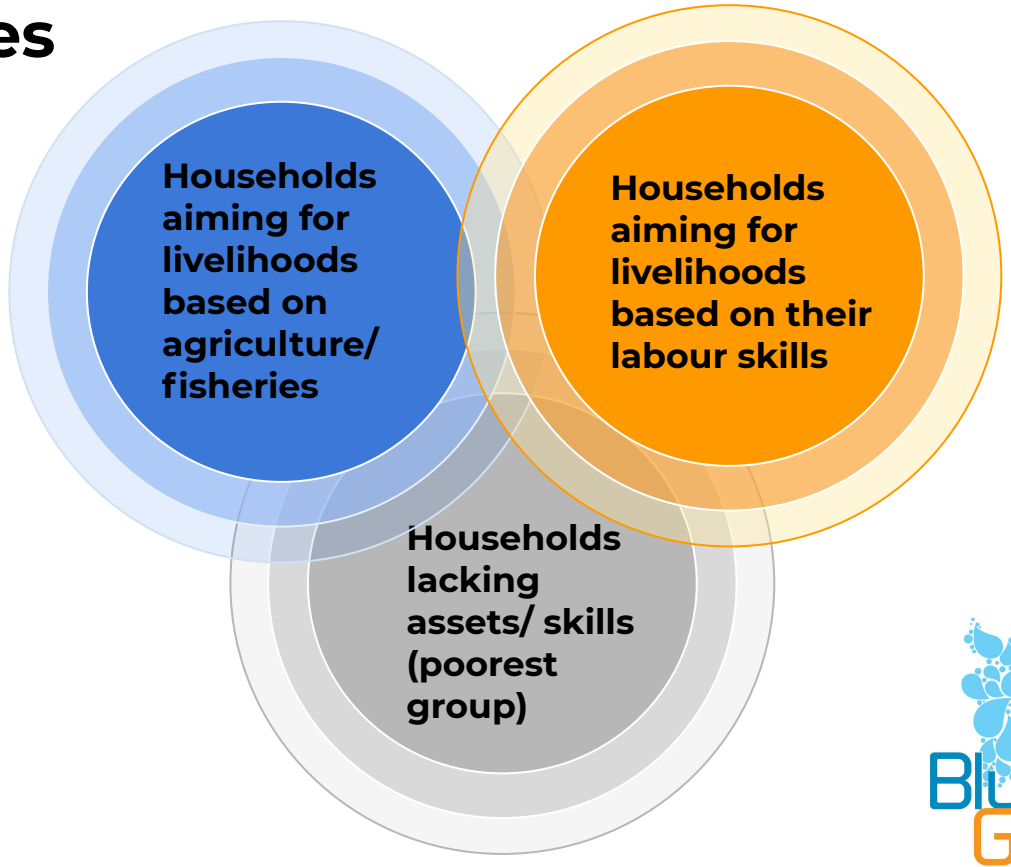
Agricultural growth
stimulates
non-farm incomes

10% increase in
farm incomes

Rural transformation framework: livelihood strategies

While many households in the polders are poor, they are heterogenous, and not involved in agriculture in the same extent.

Assets, family structures, locations, and shocks often determine the level to which each household engages in agricultural activities.

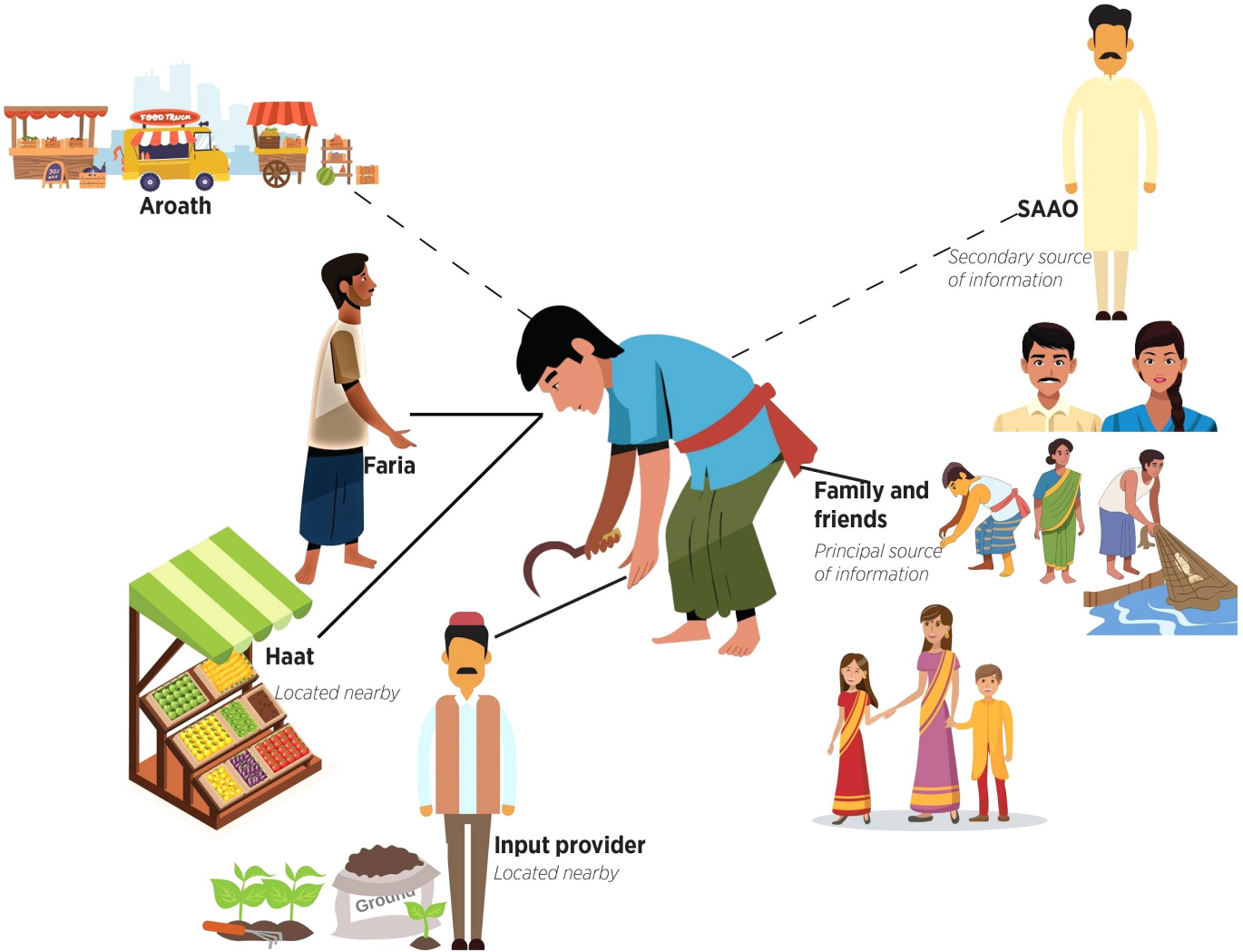


Challenges to agricultural development

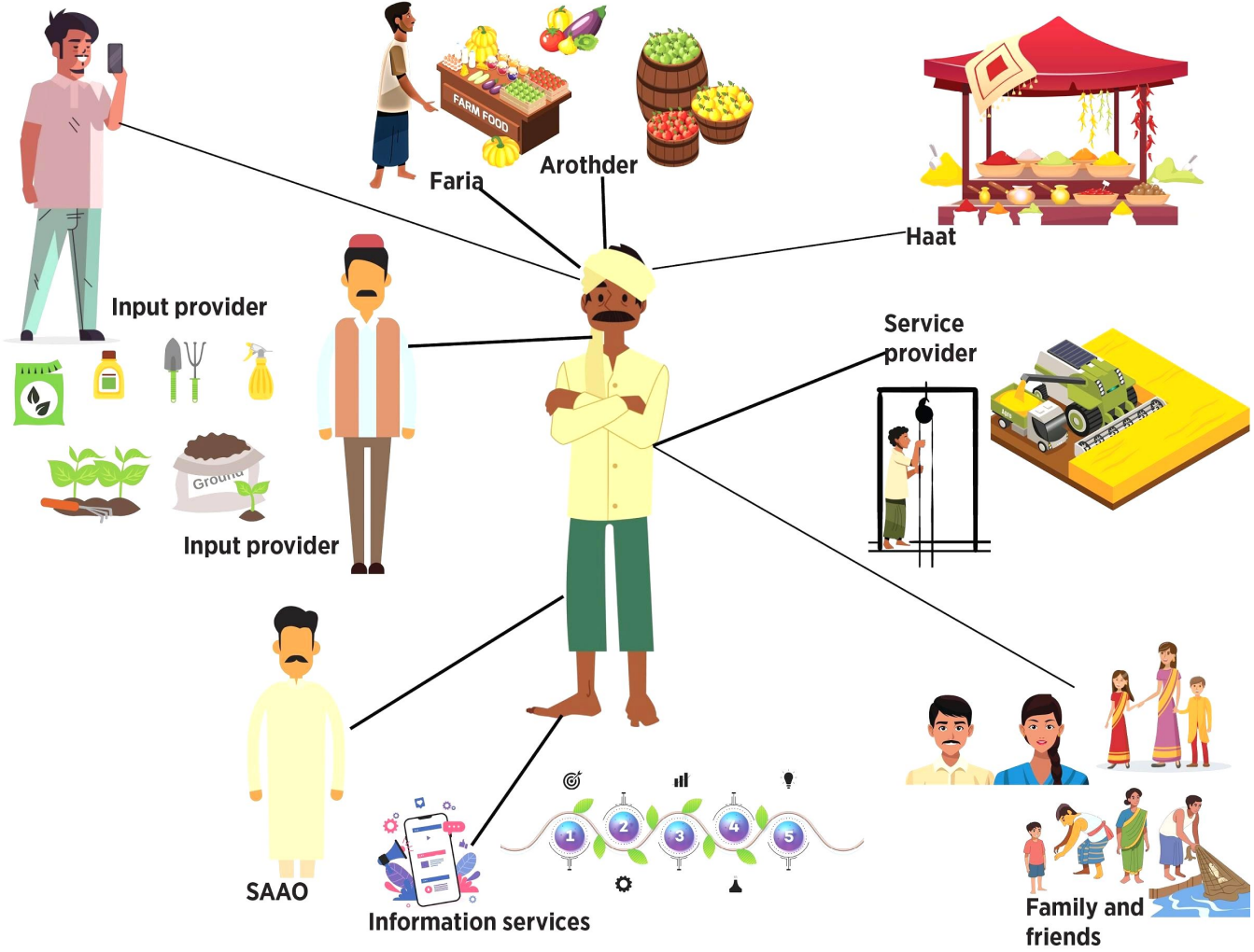
Flooding and waterlogging during rainy seasons, and a lack of fresh water and soil salinity during dry seasons, constrain cropping systems. This discourages increased investments by farmers

Household decision-making and agricultural activities are subsistence-oriented. Farmer decision-making is characterised by risk-averse practices, limited market orientation, and underdeveloped market linkages

The market system, or supporting network of input and service providers, buyers and traders, is rudimentary and small-scale. Extension services are in short supply, and do not focus on market linkages. There is a need for systemic change



Traditional farmers had few connections to the market, service providers, and other actors.



Farming as a business encourage farmers to increase connections to the market, service providers, and other actors.

Commercialisation

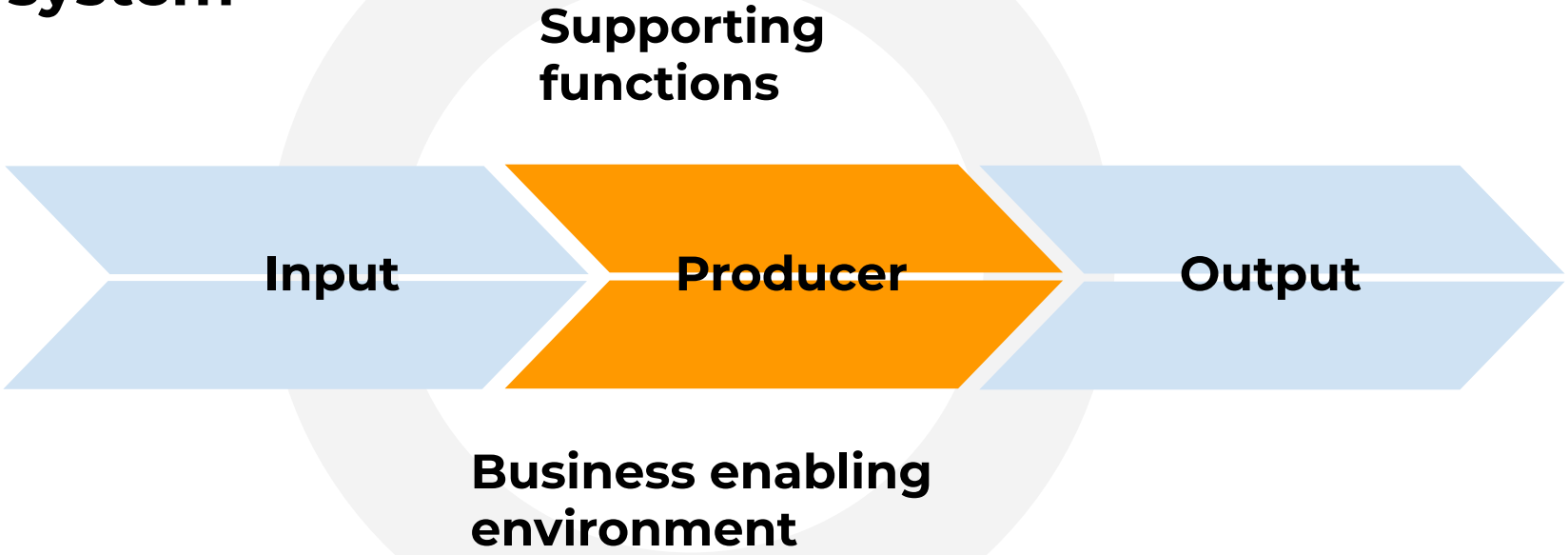
To truly benefit sustainably from the improved water management conditions, households need to upgrade their farming operations to viable businesses, that is, *to commercialise*.

Extension can facilitate their access to new technologies, inputs, services, and markets. It can also increase the capacity of providers of inputs, services, and information, and catalyse traders and buyers to adapt to the farmers' increasing commercial ambitions.

BGP interventions

Necessary changes

Market system



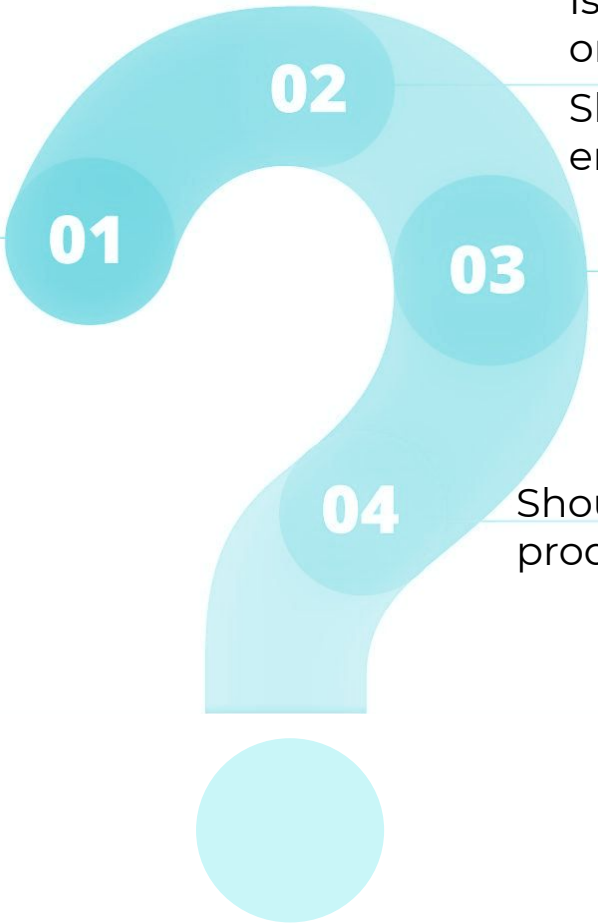
The Department of Agricultural Extension provided extension services under BGP. The approach combined Farmer Field Schools and Demonstrations.

A Farmer Field School (FFS) is a season-long and group-based learning process that takes place in the field. The training activity is always learner-centered, participatory and relying on an experiential learning approach.

Is is sufficient for extension to focus on technology transfers?

Should it include other aspects to enable farmers to commercialise?

Is the coastal zone doomed to lag behind in agricultural productivity, or is there potential to commercialise agriculture?



Should we integrate water management and extension, or implement them separately?

Should extension focus on producers only?

Increasing the effectiveness of coastal extension

Technology transfers aligned to water management conditions

Supported by practical research

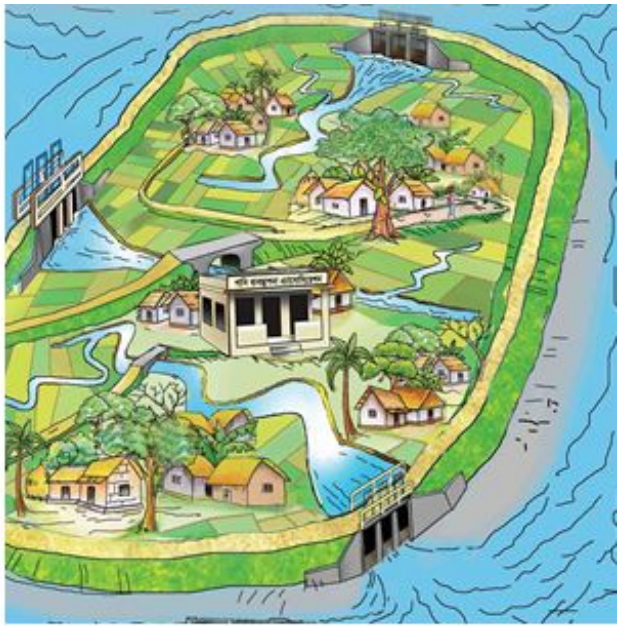
Cropping system perspective in sessions and demonstrations

Market orientation: farming as a business

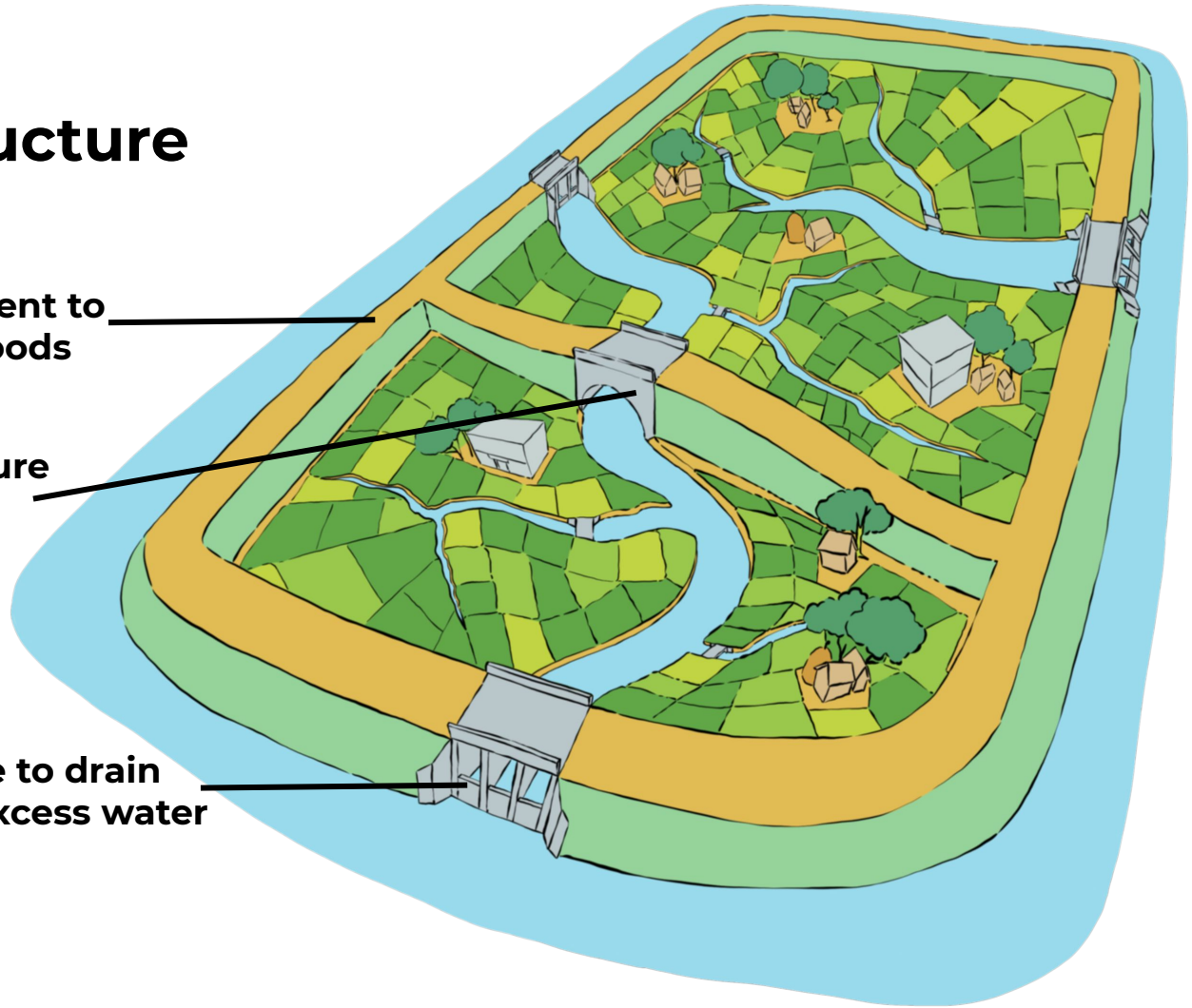
Development of linkages with market actors

Facilitating the broader market system to adapt

Polder system

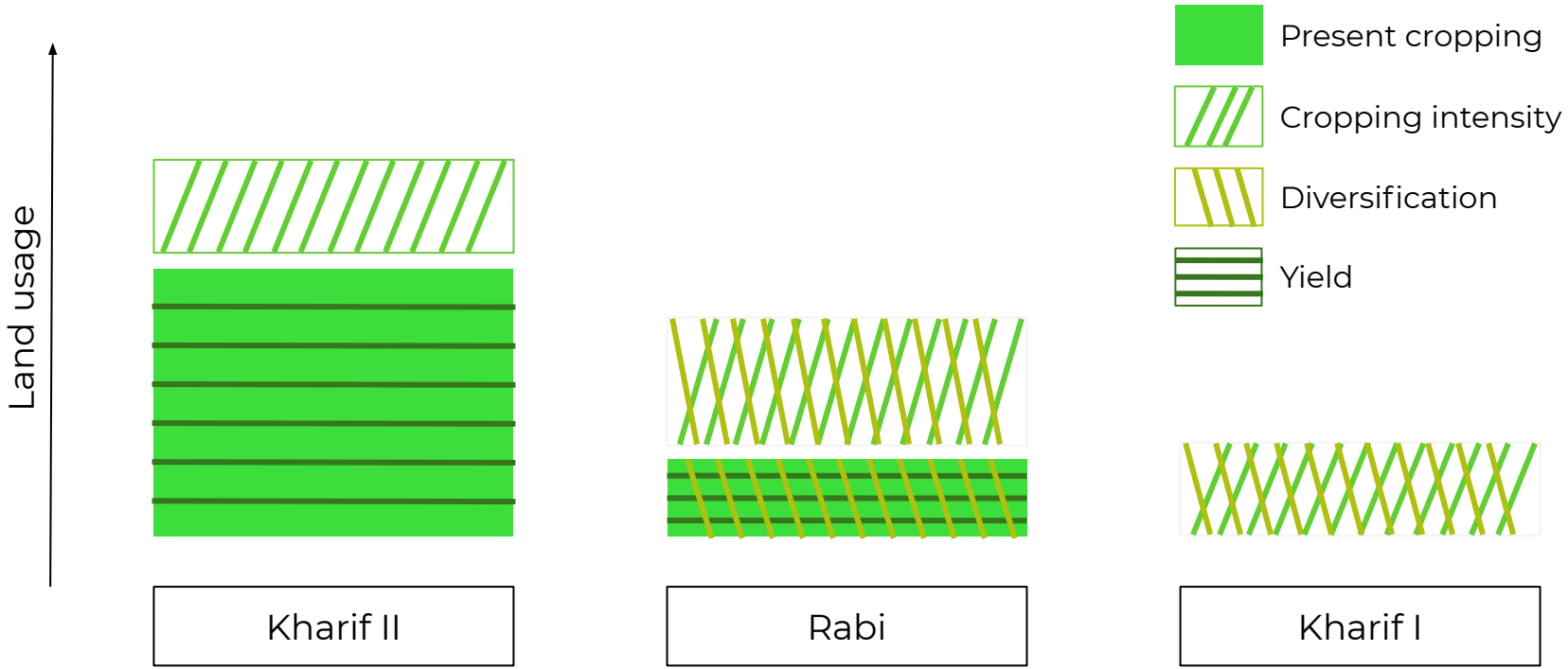


Water infrastructure interventions



Traditional cropping systems
Fallow for 40 to 45 days

Cropping systems with CII
BARI shorisha, BRRI Dhan 52, and mung bean



Potential in cropping system

Farmer entrepreneur

- Subsistence farming prevails
- New production opportunities demand market orientation

Farmer ability

- Increased market participation
- Broadened information-seeking behaviour
- Considers farming as a business
- Focus on ability to adapt to changing circumstances on their own

Market orientation

Farming as a business

“Farming as a business” is central to BGP’s extension services. This approach increases a farmer’s adaptive capacity, to commercialise. Farming as a business:

Enhances basic financial literacy

Introduced record-keeping

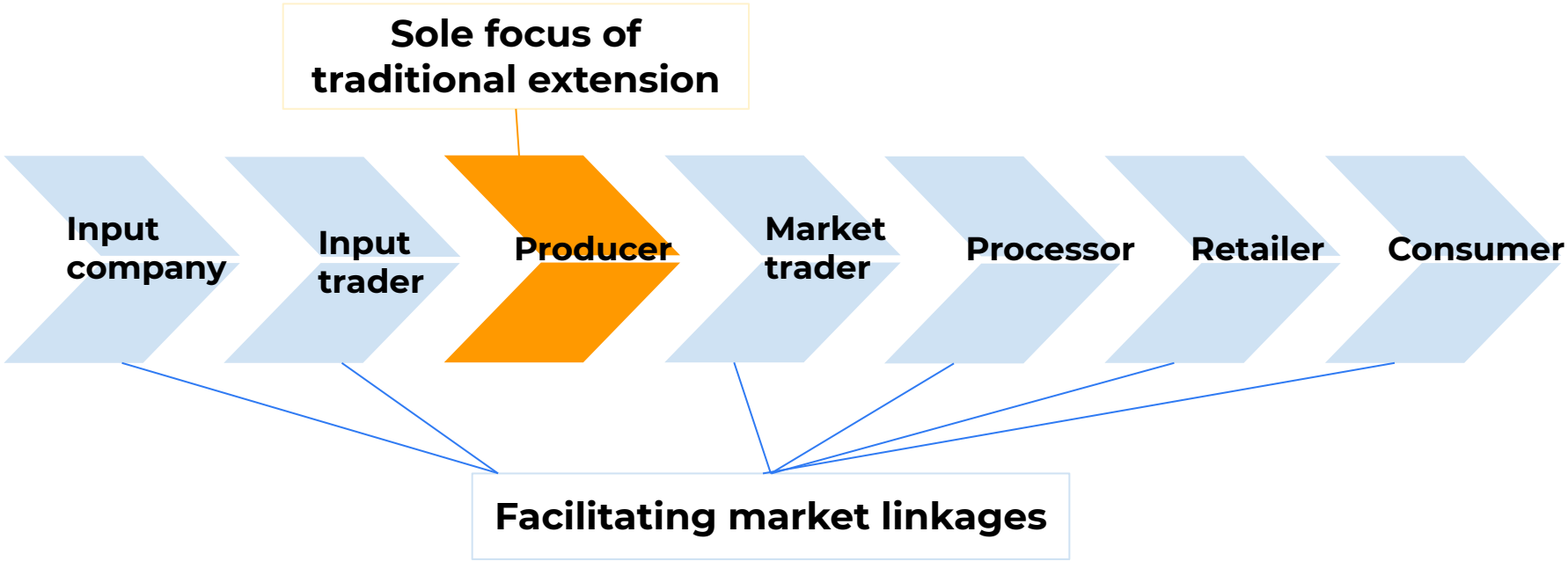
Stimulates information-seeking behaviour

Improves farm decision-making by composing simplified crop margins to clarify

Creates awareness of augmented risks

Encouraged joint decision-making

Considering market linkages



Considering market linkages

Networking for goods, information and services:

- Facilitate contact
- Establish relations
- Empower by ICT
- Enhance negotiation skills

Use of group bargaining power:

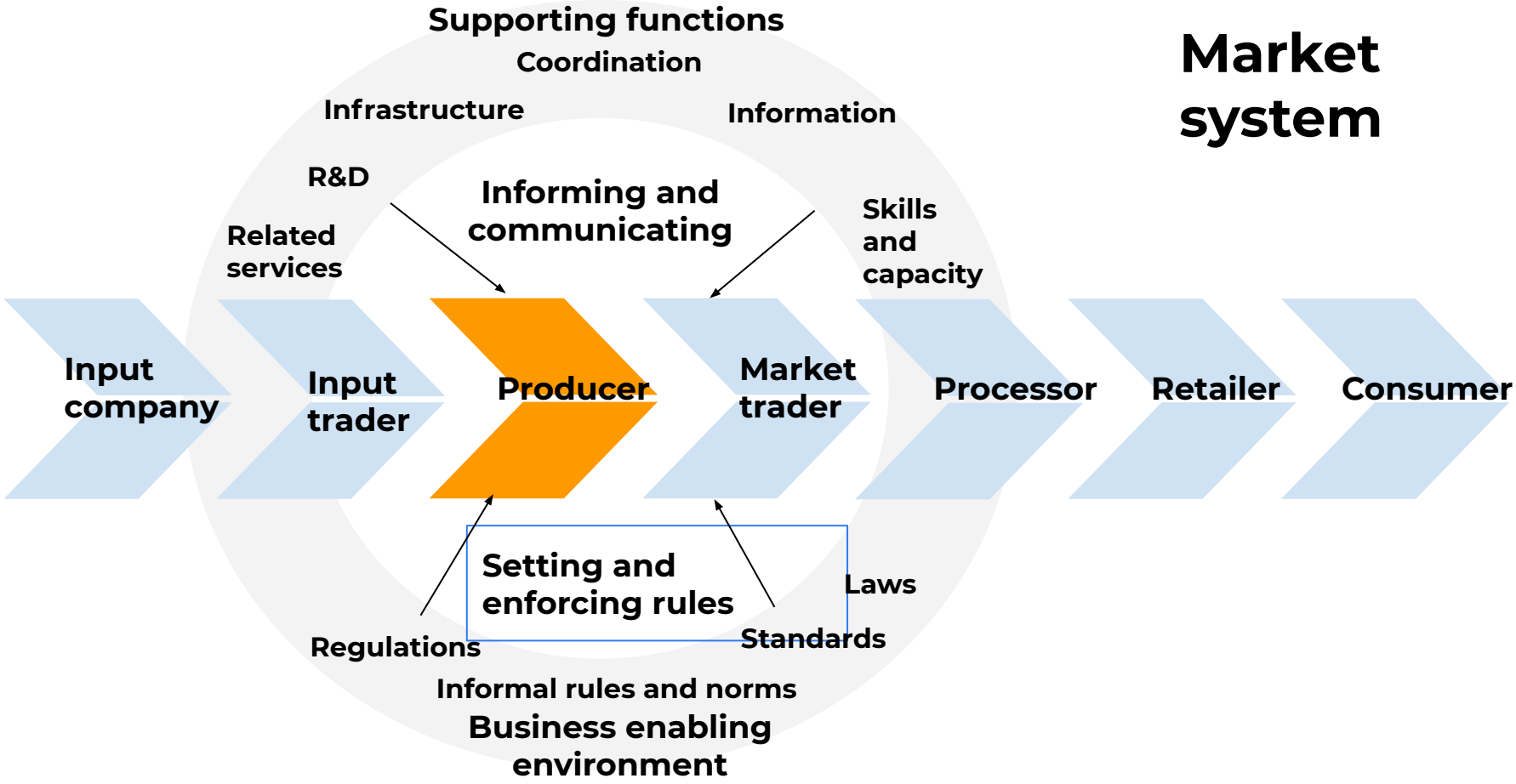
- Work with producer groups
- Organise collective actions
- Establish resource farmers

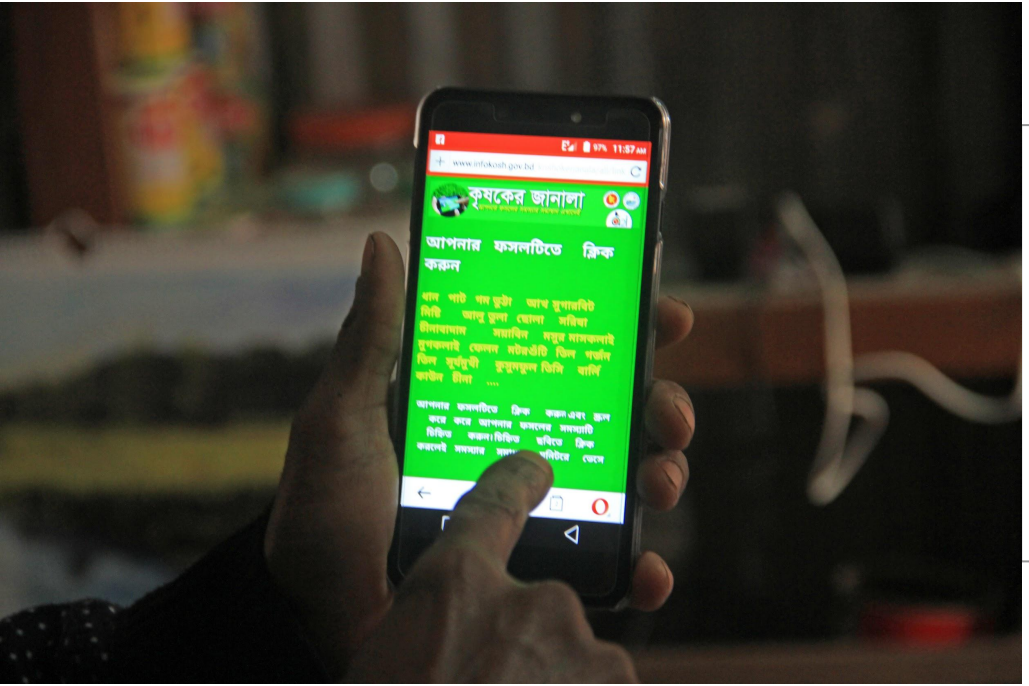
Resource farmers

- Negotiate for inputs and services
- Arrange coordinated sales upon agreement with buyers
- Efficient conduits of extension messages
- Trusted organisers with negotiation skills

Information and Communication Technology (ICT) helps both individual and resource farmers access market information, allows the identification of market options, and strengthens bargaining opportunities.

Market system





- Capacity strengthening of input and service providers
- Workshops with service providers or buyers with farmers regarding common local problems
- Facilitate properly negotiated coordinated selling with buyers
- Address support barriers and business environment issues

Catalysing market systems adaptation

BGP interventions in market systems

- **Increased engagement of RFs.** RFs are the principal points of contact for producers groups, and act as local resource persons for Water Management Organisations (WMOs)
- **Input and service providers, buyers, extension agents from both public and private sectors were encouraged to meet RFs regularly to strengthen linkages.** These meetings focussed on dealing with common challenges to find win-win solutions for all parties
- **Collection points, and organised transport and delivery of goods established where necessary.** Introduction of electronic weight measurement to enhance trust
- **BGP organised business training for input and service providers in cooperation with the Agro Input Retailers' Network (AIRN).** These focussed on mutual benefits of collective action, and guided trainees on sourcing information on various topics

- Differentiation of extension services
- Interacting with groups
- Demand driven messages
- Demonstrations, trials, and get-togethers
- Using the local resource network
- Making sources of information more accessible
- Horizontal learning
- Involving private sector actors and companies

More comprehensive and efficient mix of extension approaches

Outcomes

Blue Gold, in partnership with the Department of Agricultural Extension (DAE), undertook more than 1,200 Farmer Field Schools (FFS) and more than 700 demonstrations focussed on cropping, along with Farmer Field Days, Horizontal Learning events, and melas.

Through these, BGP reached 35,000 farming households directly, and affected another 50,000 indirectly.

Additionally, more than 1,200 farmer trainers, resource farmers, community animal health workers and input providers were trained, and 90,000 farmers participated in collective actions.

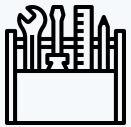
Impact of economic growth in polders

Growth of agricultural production through increases in yields, cropping intensity, and diversification

Along with farm production, incomes and labour requirements have increased. This then boosts trading volumes and service demand, resulting in more jobs and higher non-farm incomes

Labour remuneration and land leases have increased with higher productivity

In some areas, higher productivity and profitability were foregone by farmers opting for more equitable outcomes instead



Cost benefit analyses show that overall returns to cropping system improvements justify large-scale infrastructure investments


Commercialisation of farming leads to a direct increase in farm incomes.

Demand for labour: changes in the roles of women in agriculture

Agricultural labour market: changing roles of women

The expansion of agricultural activities has resulted in more demand for labour in the sector. Labour crisis is now a serious concern during peak seasons. Changes in the agricultural labour market are:

- Increased demand for on-farm labour
- Increased demand for labour which resulted in increased wage of labour
- Reduced out-migration

Shortage of labour created more employment opportunities for women. Increased income sources for women empower them at the household level.

Blue Gold finds that once farmers are benefitting from increased productivity and profitability, they are more readily inclined to safeguard those gains by organising the operation and maintenance of their water infrastructures.

CONNECT WITH US ONLINE

Blue Gold website

Blue Gold on Facebook

Blue Gold on YouTube