



Inclusive Market Development: Opportunities and Challenges for Fisheries, Vegetable, Fertiliser and Seed Sectors in Bangladesh

Nazneen Ahmed, PhD

M Harunur Rashid Bhuyan, PhD

December 8, 2016

BIDS Research Almanac



Outline of presentation

- Concepts of Inclusive market Development (IMD) or Inclusive Business (IB) and its separation from conventional concepts of inclusive growth.
- Approaches to promote Inclusive business or inclusive market development models
- Fisheries sector of Bangladesh- at a glance
- Possibilities to promote IMD in Fisheries sector of Bangladesh
- Vegetable sector of Bangladesh- at a glance
- Possibilities to promote IMD in vegetable sector of Bangladesh
- Fertiliser sector of Bangladesh- at a glance
- Possibilities to promote IMD in Fertiliser sector of Bangladesh
- Seed sector of Bangladesh- at a glance
- Possibilities to promote IMD in seed sector of Bangladesh



Why market –led inclusive growth

- It is commonly perceived that poverty alleviation is the responsibility of the government. specially, extreme poverty should be addressed only by various programs of the government such as social safety net programs.
- This conventional approach of poverty reduction also includes micro-entrepreneurship development mainly through the activities of various Non-Government Organisations (NGOs).



- These programs have become successful in reducing poverty , no doubt about that, but these attempts could only partly integrate poor with the market, while sustainable poverty reduction requires more integration of poor with the market.
- Many poor could not become 'market agent' and move vertically up the ladder of economic development.
- In a market economy, development models which ensures better integration of the poor in the production network and supply chain can go a long way to alleviate poverty.



Inclusive growth

- For growth to be inclusive, productivity must be improved and new employment opportunities need to be created.
- Inclusive growth is about enlarging the size of the economy, rather than redistributing resources. In short, inclusive growth is about raising the pace of growth and enlarging the size of the economy, while leveling the playing field for investment and increasing productive employment opportunities.
- Thus redistribution activities of the public sector cannot ensure sustainable inclusive growth in the long run if productive employment opportunities are not created in the economy, where private sector has a big role to play.

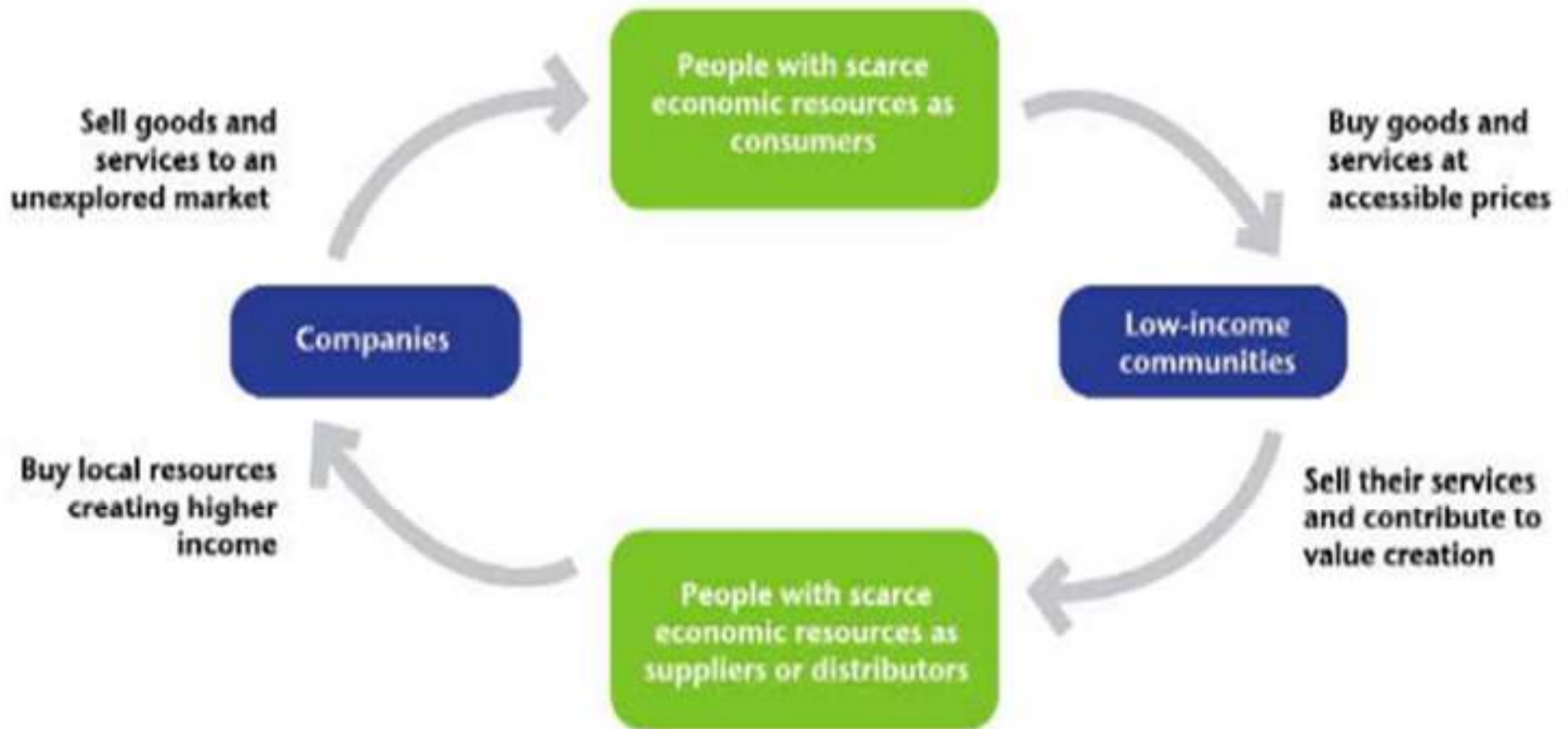


Market-led inclusive growth or inclusive business (IB)

- Market –led inclusive growth or the approach of inclusive business (IB) or inclusive market development (IMD) goes beyond traditional 'business as usual' models to make poor people more integrated in the market so that they can attain sustainable economic development. The approach is mainly based on the notion of ‘making markets work for the poor’.
- There is no established definition of IB
- UNDP report, World Business Council for Sustainable Development, (2006) addressed inclusive business as one which seeks to contribute towards poverty alleviation by including lower-income communities within its value chain while not losing sight of ultimate goal of business, which is to generate profits.



Involving poor people in the value chain





- In a nutshell
 - The IMD models include the poor people in the demand side as clients, and on the supply side as the distributors, suppliers of goods and services, or employees at various points in the value chain.
 - These models build bridges between business and poor for mutual benefits. While private actors are the main drivers behind these business models, evidence shows that government action has often been decisive for the success and growth of these innovative approaches.
 - Besides the direct benefits generated through business activities, inclusive business models also have a systemic impact by contributing to the inclusivity of markets overall, thereby generating inclusive growth.



Approaches to make market work for inclusive growth

- According to Tewes-Gradl et al (2013), the three basic approaches those may be followed by the government in support of inclusive business (IB) models or IMD models are-
- 1) **enabling** large market players (i.e. big entrepreneurs or companies) to **enter** low income markets,
- 2) **encouraging** the large players to **invest** in the low income markets and
- 3) **empowering** the poor to **engage** with larger players.



Fisheries sector at a glance

- Fisheries in Bangladesh are the principal source of animal protein
- Second dominating economic activities in the agriculture of Bangladesh.
- Broadly includes inland fisheries and marine fisheries.
- Inland fisheries sector refers to both capture and culture fisheries, while marine fisheries cover industrial (trawling) and artisanal fisheries.
- Culture fisheries or aquaculture has grown at an average annual rate of around 5% during 2011 to 2014 period (DoF, 2014)
- Bangladesh is the 4th largest global aquaculture producer in the world (2015)



Fisheries sector at a glance

- The total annual fish production in Bangladesh was estimated to be 3.55 million metric tons in 2013-14, of which 1.96 million metric tons (55%) were obtained from inland aquaculture, 0.99 million metric tons (28%) from inland capture fisheries and 0.59 million metric tons (17%) from marine fisheries (DOF 2013-14).
- Within a decade, fish production has increased from 2.21 million metric tons in 2004-05 to 3.55 million metric tons in 2013-14, an average growth rate of over 7% per annum (DOF 2013-14).



Common constraints for capture fisheries

External barriers	Internal barriers
Governance, regulation & management Contraction of fishing grounds (FCDI projects) Pollution Urbanization Environmental degradation Climate change	Overfishing Destruction of immature fish (ova, larvae, breeding fish) Use of illegal gears



Common constraints for aquaculture

Constraint	Element
Technical	<ul style="list-style-type: none">• Low input farming systems• Inadequate technical knowledge on scientific fish farming• Poor water quality and fish disease• Poor quality of hatchery fry
Social	<ul style="list-style-type: none">• Multiple ownership of ponds• Poisoning of fish farm• Poaching of fish• Friction between rich and poor farmers
Economic	<ul style="list-style-type: none">• High production costs• Lack of financial support• Low market price of fish• lack of transparency in the price formation process• Inadequate marketing facilities• inequalities in market information and• inadequate post-harvest infrastructure facilities
Environmental	<ul style="list-style-type: none">• Unplanned conversion of rice fields to ponds• Impacts on rice field ecosystem and biodiversity• Climate change (flood, drought)• Impacts of excessive use of chemicals and growth hormone



Challenges and recommendation for capture fisheries

- **JalMahal Policy** should focus on real fisherman and give leased to the poor fisherman with financial support.
- Government can provide **smart card** to the real fisherman both for government and donor's funded trainings, supports etc.
- Government can extend support by incorporating fisherman in ***ekti bari ekti khamar*** (one house one farm) project; which may help them to form cooperatives for group savings and small borrowings.
- Public water bodies appropriate for fish farming should be leased out to entrepreneurs who have **knowledge and capital**. Government should **encourage** the private sectors to involve themselves in fish farming in those water bodies- requires changes in the regulations and creation of a database for water bodies.
- **Training and awareness** among fisherman on modern fishing techniques, use of nets, negative impacts of illegal gears, and how to **mitigate the impacts of environmental degradation**.



Challenges and recommendation for culture fisheries

- Upazila Information Center (UIC) can **disseminates modern fishing technologies** in an easy way, and increase productivity to engage more private sectors.
- Quality of fish fries produced in various hatcheries needs to be **regulated and monitored**, so that they produce better quality fish fries.
- **Monitoring the quality of fish feed** supplied by the private companies is very important as **adulteration** is a common phenomenon.
- Government can provide **low cost loans** rather than current cash incentives to fish farmers for adopting new technology of production which has long lasting impacts for the sector as a whole.
- **Contact farming** to increase productivity as this creates opportunity to combine the entrepreneur's investment capacity (invest in aquaculture and fish processing) and fishermen's skill.



Challenges and recommendation for culture fisheries (contd.)

- Investors in fish farming may be given **special tax incentives** only when they have contract farming in fisheries connecting poor fishermen.
- More training programs for fish farmers and hatchery owners could be offered by the government, specially on pond management.
- **Marine based-aquaculture** could save use of agricultural land for fisheries.



Priority areas for fisheries sector development BIDS Study Findings & 7th Five Year Plan

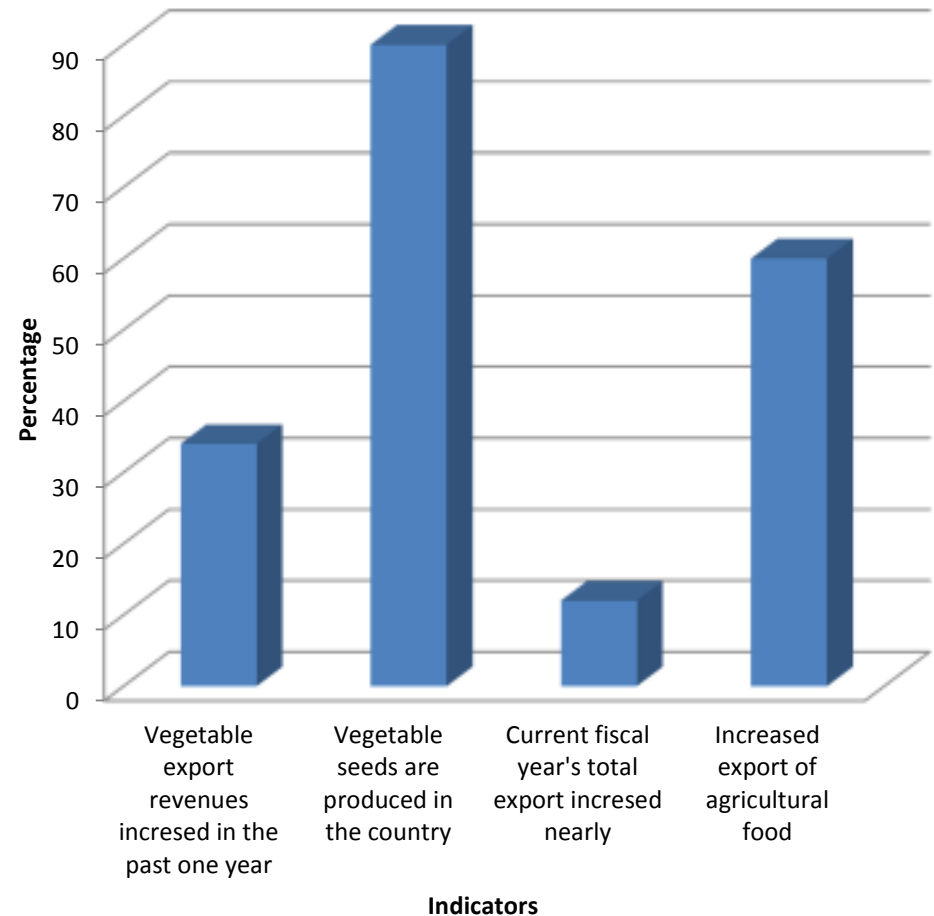
- Jal Mahal Policy: leased out to entrepreneurs who have **knowledge and capital**
- **Smart Card** for Fishermen: identifying real fishermen
- Inclusion in **existing SSNPs**: *ekti bari ekta khamar* (one house one farm) project
- Monitoring and area expansion of **capture fishing zone**
- **Quality seed and private sector**: private sector can play vital role for production, import and marketing of fish and shrimp feed, feed ingredients, minerals and vitamin premix and other inputs.



Vegetable sector in Bangladesh

- Bangladesh produced a total of 13.8 million tons of vegetables in fiscal year 2014.
- The growth rate marked a steady six percent in each of the previous three years.

Vegetable Revolution in Bangladesh





Common constraints for vegetable sector

Constraint	Element
Technical	<ul style="list-style-type: none">• Low input farming systems• Inadequate technical knowledge on scientific farming• Poor soil quality• Poor quality of inputs
Social	<ul style="list-style-type: none">• Small and scattered land• Theft of vegetables
Economic	<ul style="list-style-type: none">• High production cost• Low market price of vegetables• Lack of transparency in the price formation process• Inadequate marketing facilities• Inadequate post-harvest infrastructure facilities
Environmental	<ul style="list-style-type: none">• Unplanned conversion of rice fields to vegetables farm• Impact of climate change (flood, drought)• Impact of excessive use of chemicals and fertilizers



Challenges and recommendation for vegetable sector

- Separate policy document for the vegetable sector needs to be developed, which would cover all actors in the vegetable value chain described above.
- The policy would also support private entrepreneurs in marketing of green or processed vegetable.
- The government can **encourage** contract farming by Agro-companies, NGOs and Exporters through policy support.
- Government can **encourage** private companies to establish standard cold storage and vegetable packaging industries at local level by providing policy support and by developing incentives structure.
- The vegetable exporters are facing problem of scarcity of cargo plane and delayed customs clearance to send their products to the international markets.



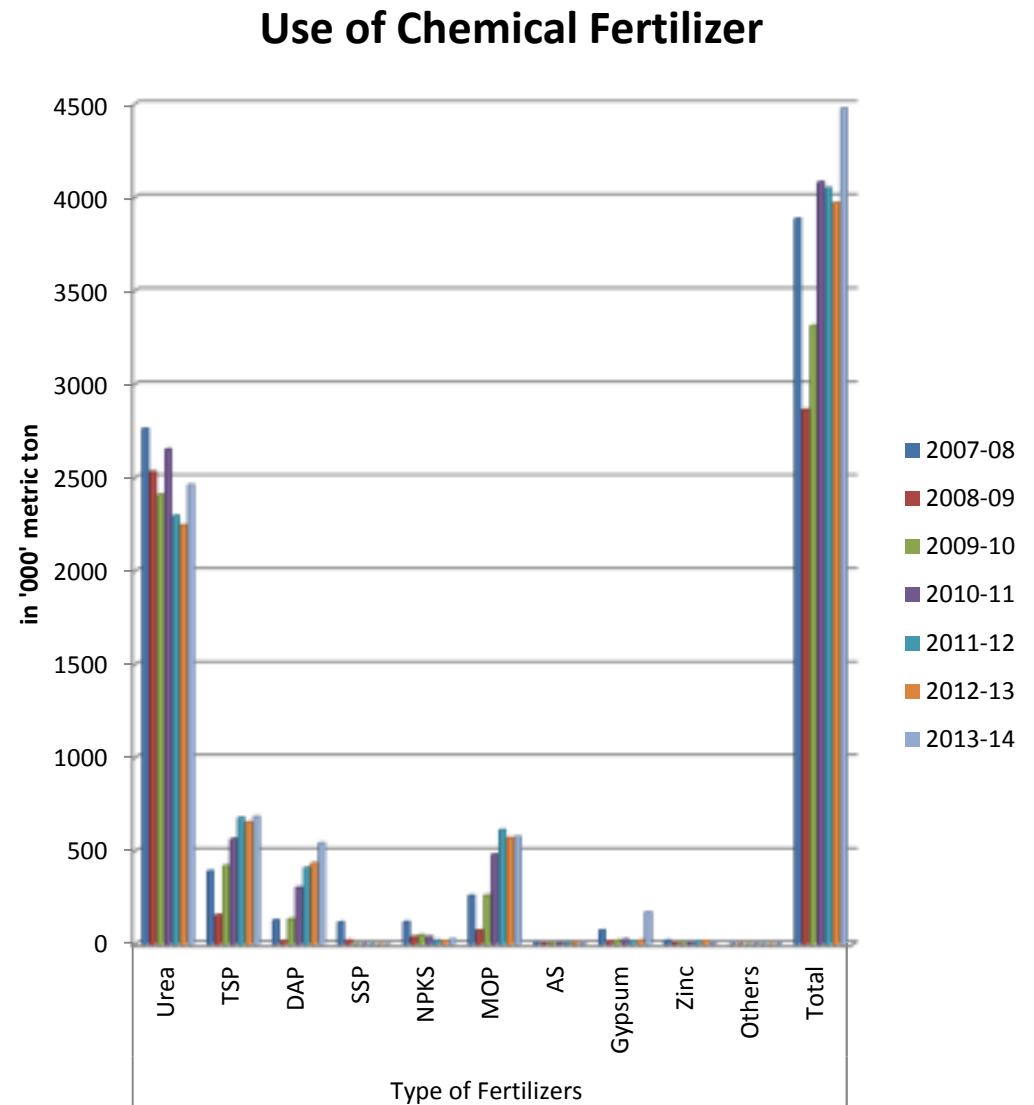
Priority areas for vegetable sector development BIDS Study Findings & 7th Five Year Plan

- Boosting Agro-Processing Industries by linking with domestic and international markets through **contract farming**.
- **Promoting agricultural diversification and expansion** of Horticultural Crops to capture the country specific vegetable export market (improve packaging, airport facilities etc.).
- ***Value Chain Development***: to improve the efficiency of agricultural marketing to reduce market distortions and the cost of marketing, and to ensure proper price for grower, and quality for consumer (cold storage, packaging, cooperatives etc.).
- Ensuring **quality of seed**, pesticide and fertilizer through proper monitoring.
- **Strengthen Local Manpower**: to increase awareness and training.
- **Homestead gardening**: increase nutritional value among poorest household members.



Fertilizer sector in Bangladesh

- Because of Green Revolution from late 1960s, the consumption of fertilizers increased dramatically and it exceeded 4.5 million metric tons in 2013-14.
- In Bangladesh the major share (around 75%) of total fertilizer is consumed by rice.





Common constraints for fertilizer sector

Constraint	Element
Technical	<ul style="list-style-type: none">• Low level of production systems• Inadequate distribution• Quality is not up to the mark
Social	<ul style="list-style-type: none">• Poor farmers have lack of knowledge about the quality of fertilizer• Local elite control the distribution system
Economic	<ul style="list-style-type: none">• Lack of financial support• Lack of transparency in the price formation process• Inadequate marketing facilities• Inadequate storage facilities
Environmental	<ul style="list-style-type: none">• Impact of climate change (flood, drought)• Impact of excessive use of fertilizers



Challenges and recommendation for fertilizer sector of Bangladesh

- Adequate warehousing facilities especially in the relatively remote areas are necessary.
- To reduce shipment time and transportation cost, fertilizer supply to the dealers should be made, as far as possible, from the nearest buffer stocks.
- To ensure efficient and effective marketing of fertilizer, dealers' appointment process needs to go beyond the hand of elite and powerful.
- To stop adulteration of fertilizers, the monitoring network especially at the field level needs strengthening.



Priority areas for fertilizer sector development BIDS Study Findings & 7th Five Year Plan

- **Organic fertilizer**, support will be given for the production of bio-fertilizers and facilitating their increased uses.
- **Distribution of fertilizer**, ensure timely supply of fertilizers to meet the increasing demand (related increasing buffer stock, fair & transparent dealer selection process).
- **Adulteration of fertilizer** needs to be controlled.



Seed sector in Bangladesh

- Rice, wheat and maize are the major cereal crops of the country.
- The annual seed demand for each of these three crops is about 313.96, 72.00 and 3.30 thousand tons, respectively; but the public sector can meet up only 23.67%, 26.46% and 7.06% respectively .
- Using the quality seed can enhance the productivity by 15-20 percent.



Common constraints for seed sector

Constraint	Element
Technical	<ul style="list-style-type: none">• Low seed collection systems• Inadequate technical knowledge on scientific seed collection and preservation• Poor postharvest handling• Poor grading system
Social	<ul style="list-style-type: none">• Small and scattered land
Economic	<ul style="list-style-type: none">• High production costs• Lack of financial support• Lack of transparency in the price formation process• Inadequate marketing facilities• Inadequate post-harvest infrastructure facilities
Environmental	<ul style="list-style-type: none">• Unplanned conversion of rice fields to vegetables farm• Impact of climate change (flood, drought)• Impact of poor packaging system



Challenges and recommendation for seed sector of Bangladesh

- The Seeds (Amendment) Act 2005 has restricted the private sector to develop new varieties of notified crops and their breeder seed (BS) production.
- Reforms are necessary to remove/lessen these barriers which will **encourage** private sector investor.
- Quality Varietal Replacement Rate (VRR) or Varietal Turnover Rate (VTR) needs to be increased tremendously to **empower** poor farmers.
- To stop seed adulteration field level monitoring needs to be strengthened.



Challenges and recommendation for seed sector of Bangladesh

- The Seeds (Amendment) Act 2005 has restricted the private sector to develop new varieties of notified crops and their breeder seed (BS) production.
- Reforms are necessary to remove/lessen these barriers which will **encourage** private sector investor.
- Quality Varietal Replacement Rate (VRR) or Varietal Turnover Rate (VTR) needs to be increased tremendously to **empower** poor farmers.
- To stop seed adulteration field level monitoring needs to be strengthened.



Priority areas for seed sector development BIDS Study Findings & 7th Five Year Plan

- **Contact farming for seed**, emphasis has been given to private sector involvement in research and development of hybrid and HYV seed.
- **Quality seed**: to ensure production of quality seeds/quality planting material at all stages of its (seed adulteration in concern issue for this case) needs to be strengthen.



Thank You