

Ensuring Food Security through increased Agricultural Production with efficient Water Resource Management



**AGRICULTURE, FOOD AND WATER
RESOURCES SECTORS**

15 FEBRUARY 2010

BRIEF OVERVIEW OF THE SECTORS

Crop Agriculture

- Production tripled from 10 million MT to 30 million MT over last 3 decades
- Total labor force engaged in agriculture : 48.4 %
- Contribution of Crop agriculture to total GDP : 11.55%. and to Agricultural GDP : 56%

Fisheries & Livestock

- Contribution to GDP (2008-09) : 7.30 %
- Contribution to agricultural GDP : 37.90%

BRIEF OVERVIEW...

FOOD SECURITY

- National Food Policy 2006 and its Plan of Action (2008-2015) : ensuring food security with availability, access and nutrition
- Concerns : Seasonal fluctuation of food supply and seasonality of prices
- Food import constitutes significant share of domestic supply
- Food security affected by natural disasters

BRIEF OVERVIEW...

WATER RESOURCES

- Main focus : structural interventions in flood control, drainage improvement, irrigation and river management
- 5.05 million hectares under dry season irrigation--out of total irrigable area of 7.60 million hectares
- Surface water irrigation 21.13%
Groundwater irrigation 78.87%

BRIEF OVERVIEW...

WATER RESOURCES...

- BWDB activities including FCD/FCDI projects create favorable condition for HYV rice production and rural employment
- 57 trans-boundary rivers flow through Bangladesh
- Regional water sharing agreements on trans-boundary rivers are prerequisite for water management plan.

Recent progress

Crop Agriculture

- Crop production transforming from subsistence level to commercial farming
- Private sector's role in input distribution growing
- Import of Agri. equipment liberalized
- Vegetables and other high value crops export to overseas markets increased
- Salinity resistant and early harvesting rice varieties introduced
- Crop improvement through biotechnology increased
- Agribusiness development through group marketing approach improved

Recent progress...

Fisheries and Livestock

- By 2021 self sufficiency in fish production targeted
- Sustainable improvement of milk, egg and meat production
- Improved processing and value addition
- National Fisheries Strategy developed with 8 sub-strategies
- National Livestock Development Policy 2007 being implemented with 13 sub-strategies

Food Security

Recent progress...

- Allocation to safety nets increased in 2009-10
- Coverage of VGF, VGD, TR, FFW and GR increased in recent years
- Programs to support hardcore poor with special emphasis on 80 high poverty prone Upazilas undertaken
- Upazila based poverty map used for the first time to identify concentrated pockets of hardcore poor
- Govt. successfully handled post-disaster relief & rehab. and ensured food security of Aila and Sidr victims
- Programs to enhance storage facilities of food grains undertaken

Recent progress...

Water Resource

- Integrated Water Resource Management (IWRM) being practiced
- Restoration of river systems initiated with government's own fund
- Trans-boundary river water management dialogue restarted
- BWDB flood control measures increased from 3.791 million ha to 4.521 million ha from 2004-05 to 2007-08

Challenges

Crop Agriculture

- Maximizing production and harnessing productivity gains
- Improving water efficiency and shift to water efficient food crops
- Maintaining lower price and availability of quality inputs

Challenges...

Crop Agriculture...

- Providing sufficient and efficient irrigation facilities and keeping prices and costs low
- Establishing research-extension-farmers and market linkages
- Strengthening research and extension systems
- Capacity building of small holders in facing effects of globalization

Challenges...

Fisheries & Livestock

- Habitat conservation
- Checking/controlling over-fishing and indiscriminate killing of juveniles and mother fish
- Creating alternative income opportunities for the fisher people
- Making available quality fish and shrimp seed at reasonable price
- Ensuring supply of quality feed at affordable price

Challenges...

Fisheries & Livestock...

- Ensuring fish farmer's access to financial institutions
- Ensuring quality and traceability of exports
- Limited knowledge and technical skills of smallholder dairy farmers
- Ensuring availability of quality feeds and fodder
- Controlling frequent occurrences of diseases
- Ensuring good quality slaughter house services

Challenges...

Fisheries & Livestock...

- Ensuring presence of abattoir monitoring system
- Making disease diagnostic facilities available
- Ensuring effective disease surveillance system
- Ensuring increased production of fish, milk, meat and eggs through small holders encouragement and private sector promotion

Challenges...

Food Security

- Balancing between price high enough to serve as incentive for small producers and low enough for poor consumers
- Funding for expanded social safety nets and storage capacity
- Improvement of intra-household food entitlements between men and women and between adults and children

Challenges...

Water Resources

- River erosion control and sustainable river management
- Capital dredging and river bank protection
- Management of trans-boundary river basins to augment sufficient surface water in dry season and to control flood
- Ensuring availability of groundwater for irrigation and drinking

Challenges...

Common challenges for all sectors

- Adapting to climate change impacts
- Minimizing knowledge gap
- Development of value chain for fresh agricultural products
- Ensuring food safety
- Establishing Marketing Information System (MIS) and Food Information System (FIS)
- Availability of adequate well trained professional manpower

The Way Forward

Crop Agriculture

1. Irrigation management including extensive utilization of surface water
2. Supplementary irrigation through dug-wells
3. Utilization of fallow land and reclamation of cultivable land in waterlogged areas
4. Focusing more on extension of 'Boro' rice cultivation in the South and encouraging 'Aman' and High Value Crops in the North
5. Extension of saline, cold, drought, flood, submergence and heat tolerant varieties

Way Forward...

Crop Agriculture...

6. Ecosystem based crop zoning
7. Mechanization of agriculture
8. Ensuring quality of seeds and their multiplication
9. Implementation of measures to combat climate change impact
10. Development of modern, irrigated and least-risk agriculture
11. Supply of agricultural inputs at lower cost
12. Strengthening of agricultural research and extension systems

Way Forward...

Crop Agriculture...

13. Increasing production of profitable minor crops
14. Development of ecologically sound and sustainable technologies for rain-fed, submerged, dry land and wetland farming systems
15. Assisting farmers in forming groups and associations for promotion of efficient marketing system
16. Development of appropriate location-specific, cost-saving production and post-harvest technologies
17. Establishing Public Private Partnership (PPP)

Way Forward...

Fisheries & Livestock sub-sector

1. Improve conservation of aquatic biodiversity
2. Improve food safety measures for domestic and exportable fisheries products
3. Capacity development through implementation of demand driven HRM/ HRD programs, extension services
4. Facilitate access to information
5. Strengthen applied research as per demand of the industry

Way Forward...

Fisheries & Livestock ...

6. Expansion of cooperative dairy development in potential areas
7. Replication of successful pro-poor models for community-based smallholder poultry and dairy development
8. Promotion of supply chain based production, processing and marketing of milk and milk products
9. Quality control of poultry feeds and feed ingredients
10. Development of Community-based veterinary services

Way Forward...

Food Security

1. Ensure food security by strengthening public procurement system
2. Strengthen OMS for increased access to food for the urban poor
3. Maintain an optimum level of food stock
4. Ensure access to food at affordable price for hardcore poor, disadvantaged groups and persons with disabilities
5. Operate special food program in poverty/disaster prone areas

Way Forward...

Food Security...

6. Increase awareness about safe and nutritious food through mass media and school education
7. Improve food management and monitoring
8. Ensure remunerative price to the producers through procurement of rice during harvest period
9. Increase storage capacity by additional 0.784 million MT within next 4 years.

Way Forward...

Water resources

1. River erosion control through sustainable river management by capital dredging and river bank protection
2. Drainage of Ganges-Brahmaputra basin by excavating main drainage channels and maintenance through regional action
3. Regional Cooperation: a basin wide approach with concerted regional participation from co-riparian countries
4. Enhanced surface water irrigation through barrage, rubber dam etc.

Way Forward...

Water Resources....

5. Dredging, protection, water reservoir and polder programs must all be in an integrated manner
6. Addressing climate change impacts through Integrated Coastal Zone Management (ICZM)
7. Management of water related disasters
8. Management of water resources
 - (a) to combat river erosion, harmful sedimentation and land degradation
 - (b) to accelerate reclamation of land from Bay of Bengal

Expected Support from Development Partners

Crop Agriculture :

1. Surface water irrigation management for higher water productivity
2. Adaptation and Mitigation activities for Climate Change
3. Research for varietal development
4. Capacity building in seed development
5. Production of HYV and hybrid seeds
6. Soil fertility improvement
7. Harvest Management
8. Marketing system improvement

Expected Support from Development Partners...

Crop Agriculture...

9. Mechanization in agriculture
10. Zoning for crop production
11. Knowledge gap and yield gap minimization
12. Strengthening NARS and extension system
13. HRD in agricultural departments
14. Infrastructure support including upgrading labs
15. Strengthening biotechnological research
16. Entrepreneurship development for export

Expected Support from Development Partners..

Fisheries & Livestock Sub-sector:

1. Intensification and diversification of Aquaculture Practices
2. Development of inland capture fisheries and culture based fisheries resources
3. Development of water management facilities for eco-friendly coastal shrimp culture
4. Conservation and management of fisheries resources

Expected Support from Development Partners..

Fisheries & Livestock ...

5. Development and extension of Creak Aquaculture in hilly areas
6. Ensuring food safety in fish/shrimp
7. Technical/research/financial support for increased egg, milk and meat production
8. Capacity Development of DLS for ICT, research, product management, disease diagnosis, marketing, veterinary services

Expected Support from Development Partners..

Food Security

1. Building infrastructures i.e. godowns, silos
2. Early warning and disaster preparedness
3. Safety Net Programs
4. Strengthening monitoring capacity and computerization of storage and distribution systems
5. Implementation of NFP-POA

Expected Support from Development Partners..

Water Resources

1. Capital dredging and river bank protection
2. Irrigation
3. River management
4. Costal zone management
5. Climate change monitoring
6. Land reclamation and settlement

Thank You