

CAPACITY BUILDING OF EXTENSION WORKERS AND FARMERS IN EXTENSION EDUCATION

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Introduction

In India, the income from agriculture is about 29% to GDP and is considered as the backbone of Indian economy. Since India is one of the important partner in business through World Trade Organization (WTO), new challenges are being faced by Indian economy in general and agricultural economy in particular. Since more than 65% population of this country is engaged in agricultural, it requires a serious thinking, rigorous planning and sincere execution of the policies in this regard. The days of subsistence agricultural have gone. With the implementation of WTO agreements since 1995, the whole world has become a village market, where quality and quantity of any products effects the prices in the whole world market. The socio-cultural conditions in India do not allow to become the player of WTO. However in present circumstances, no country can develop while remaining in isolation. Moreover, the Indian industrialists and farmers have become very lethargic in performance and production. Most of the goods produced in India are of poor quality.

Keeping the above factors in view, the then prime minister of India Sh. Narshimha Rao and his Government was compelled to sign the GATT agreement to induce the sense of competition among Indians and to produce high quality products in large quantities. Some of the Indian trade unions and leaders of farmer unions are advocating that India should try to keep away from WTO agreements, but neither it is possible nor feasible at this movement.

Since India is one of the important players in WTO, we have to prepare ourselves to meet the challenges of this agreement. As per requirement for

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the time, a serious thinking, rigorous planning and sincere execution at all front is required. The farmers of the country have to be guided to produce high quality agricultural commodities in large quantities. For meeting this purpose the capacity of extension personal as well as farmers has to be built in a short time.

Areas of Capacity Building of Extension Personnel

Capacity building means developing the capacity of extension personnel to guide the farmers to produce high quality agricultural products in large quantities so as to get good profit and income. To decide upon the areas of capacity building of extension personnel in the country, we have to think about the present requirement. At present, for success of any work, the information technology has become an essentiality. The technical knowledge of local crops & knowledge of national & international market is essential for the farmers. Because of fragmentation of land into smallholdings, the knowledge of economic use of the important inputs like seeds, fertilizers, pesticides is must for the farmers. The group farming is also required due to small holdings. Therefore, organization of farmers into various groups has become an essential area for acquiring the knowledge & skills. Considering all the above factors in mind, the following areas/subjects are essential for capacity building of farmers.

Definition

Capacity building means to impart sufficient knowledge and to develop adequate skills among the extension personnel and subsequently in farmers, to produce high quality agricultural & allied products in large quantity so as to enable the farmers to get good price at local, national & international market, for raising their income.

The capacity of extension personnel is said to be built when they have acquired sufficient knowledge as well as skills to do particular task/work. Keeping in view the present requirement for high quality agricultural produce, capacity of extension personnel and farmers is required to be built in following areas :

A) Areas/subjects in which knowledge is required:

a) Technical subject:

1. Type of occupation/subsidiary occupation.
2. Type of crops suitable to local conditions.
3. Varieties of local crops.
4. Weather analysis.
5. Package of practices of local crops.
6. Value addition to agricultural produce.

b) Local, national & international market.

c) Knowledge of information technology

1. Computer Application
2. Video production
3. Interactive computer-video techniques.

B) Areas/subjects in which knowledge as well as skill is required:

a) Credit facilities

b) Seeds of different crops & varieties

c) Pesticides

d) Irrigation systems

e) Agricultural implements

f) Diversification according to need

C) Areas/subjects in which skill is required:

a) Technical skill related to local agricultural/horticulture & allied areas.

b) Value addition skill to Agriculture/Horticulture & other produce.

c) Business skills in analysis of cost & benefit of different produce.

d) Marketing skills

e) Organizational skills

- f) Management skills
- g) Communication skills
- h) Information technology skills

Methods/procedure of capacity building of extension personnel/farmers

There are different areas/subjects in which capacity of extension personnel has to be built. Since capacity building includes knowledge & skill, they have been divided into 3 sub-heads like:

- A) Areas in which knowledge is required.
- B) Areas in which knowledge as well as skill is required.
- C) Areas in which skill development is required.

Now a brief account of different areas of capacity building is given herewith. The methods/procedures of capacity building in those areas along with necessary infrastructure & duration is also being described below:

Sr. No.	Areas/Sub-area/ Subject	Method/Procedure of capacity building	Infrastructure required	Approximate duration
A. Areas in which knowledge is required:				
a) Technical subjects				
1.	Selection of occupation/ subsidiary occupation	1. Training/Demonstration 2. Guidance from extension workers. 3. Exhibitions 4. Farmers fairs 5. Extension literature 6. T.V./Video film show 7. Radio 8. Newspapers 9. Fellow farmers 10. Field visits 11. Computers/ Internet access 12. Field Campaign	1. State Agril. Training Institutions 2. Extension Department staff 3. Organization of exhibitions and farmer fairs. 4. Conducting field visits 5. Farmer exchange programmes 6. Computer center	One week

Sr. No.	Areas/Sub-area/ Subject	Method/Procedure of capacity building	Infrastructure required	Approximate duration
2.	Local crops	As above	As above	One week
3.	Varieties of local crops	As above	As above	One week
4.	Package of practices of local crops	As above	As above	15 days
5.	Value addition to Horti./ agriculture and other (milk) produce	As above	As above	15 days
6.	Weather analysis	Training at remote sensing centre of the concerned state.	Remote Sensing centre	One week
b)	Local, National & International market	As in a (1)	As in a (1)	One week
c)	Information technology 1. Computer 2. Video 3. ICVT	– Training – Demonstration	Training Institutions having Information technology lab	15 days
B) Areas in which knowledge & skill is required :				
a)	Credit facilities	As in a (1) + Demonstration	As in a (1)	One week
b)	Seeds of different crops and varieties	As in a (1) + – Demonstration – Skill teaching sessions	As in a (1)	One week
c)	Pesticides	As above	As above	One week
d)	Irrigation systems	As above	As above	One week
e)	Agricultural Implements	As above	As above	15 days
f)	Diversification according to local need	As above	As above	One week
g)	Communication	As above	As above + Extension education institute	15 days

Sr. No.	Areas/Sub-area/ Subject	Method/Procedure of capacity building	Infrastructure required	Approximate duration
C) Areas in which skill is required				
a)	Technical skills required to local agriculture/ Horticulture crops	1. Lecture/talk 2. Group discussion 3. Demonstrations 4. Skill teaching sessions 5. Practice sessions	1. State Agril. Training Institutions 2. State Agril. Universities	4 days to 1 week in each sub-area as per need
1.	Selection of variety			
2.	Seed treatment			
3.	Sowing method			
4.	Irrigation			
5.	Fertilizer application			
6.	Weed control			
7.	Diseases & pest control			
8.	Harvesting			
9.	Technical skills required to dairy/poultry			
b)	Value addition skill to Agri./Horti. & other produce (milk/meat, etc.)			
1.	Grading of Horti./Agril. produce	1. Demonstrations 2. Skill teaching sessions 3. Practice sessions	1. Value addition centers 2. Processing plants 3. Dairy/Milk/Vegetable plants.	One week
2.	Preparing different produces from Dairy/Agril./Horti. produce	As above	As above	One week to 15 days as per need of a product
3.	Labeling & packing of Agril./Horti./Dairy/Poultry products for sale	As above	As above	One week

Sr. No.	Areas/Sub-area/ Subject	Method/Procedure of capacity building	Infrastructure required	Approximate duration
c)	Business Skills in analysis of cost & benefit for Agril./ Horticultural crops & allied areas like dairy/ poultry, etc.	1. Lecture talk 2. Demonstrations 3. Skill teaching sessions 4. Practice sessions	1. Agricultural/ Dairy/Poultry/ Marketing Training Instts. 2. State Agril. Universities	4 days to one week
d)	Marketing Skills			
1.	Research on demand and supply of different Agril./ Horti. Crops & allied products like milk, poultry meat, vegetables, etc.	1. Training 2. Handling & operation of Internet on computers 3. Market/Mandi surveys/ visits	1. Agriculture/ Horti./Dairy/ Poultry Marketing Training Institutions. 2. State Agril. Universities 3. Markets like Kisan Ki Mandis, Rytu Bazars 4. Anaj/Vegetable Mandis.	One week in each sub area
2.	Sale's skills	As above	As above	One week
e)	Organizational Skills			
1.	Organization of Farmers' group - Crop wise	1. Training in Leadership 2. Training in Group Dynamics, Group Formation. 3. Role performance in groups.	1. Co-operative Training Institutions 2. Extension Education Institutes 3. MANAGE, Hyderabad	One week
2.	Organization of Farmers' Societies/Unions & Federations	Training on Performance in co-operative Societies/ Unions/Federation	As above	One week
3.	Formation of self-help groups of male & female farmers/villagers' group	Training on performance in self-help groups	As above	One week

Sr. No.	Areas/Sub-area/ Subject	Method/Procedure of capacity building	Infrastructure required	Approximate duration
4.	Decision making skills	Training in decision making	State Training Institutions	3 days
5.	Conflict Management	Training in conflict management	Training Institutions	3 days
6.	Social & Behavioural skills	1. Interpersonal communication 2. Attitude development 3. Personality development 4. Motivation skill		
f) Management Skills				
1.	Production Management – Selection of variety – Timely sowing – Timely fertilizer & irrigation – Timely weed/disease & pest control – IPM – INM – Accurate dose of seed, fertilizer & chemicals. – Timely harvesting	1. Lecture/Talks 2. Demonstrations 3. Skill teaching sessions 4. Practice sessions	1. Technical Trg. Institutes 2. State Agril. Universities 3. State Agril. Trg. Institutes 4. MANAGE, Hyderabad 5. Extension Education Institutes	One week
2.	Agri-Business Management Skills	As above	As above	One week
3.	Marketing Management Skills	As above	As above	One week
4.	Man management skills/ Process Skills – Aim setting – Review of work – Observation & feedback – Time Management – Co-operation/Co-ordination – Delegation – Authority/Leadership – Skill identification – Planning & execution – Team spirit – Behaviour in group	As above	As above	One week

Sr. No.	Areas/Sub-area/ Subject	Method/Procedure of capacity building	Infrastructure required	Approximate duration
g) Communication Skills				
1.	Extension/ Training Methods	1. Lecture/Talk 2. Demonstration 3. Skill teaching sessions 4. Practice sessions	Extension Education Institutes	One week
2.	Communication Media – Projected media – Non-projected media	As above	As above	One week
3.	Video Production & Slide making	As above	As above	One week
h) Information Technology Skills				
1.	Computer Application	1. Lecture/Talk 2. Demonstration 3. Skill teaching sessions 4. Practice sessions	1. Extension Education Institutes 2. Private/Govt. Computer Trg. Centers	One week
2.	Operation of Internet & E-mail system	As above	As above	One week

Conclusion:

Capacity building means to impart sufficient knowledge and to develop adequate skills among the extension personnel and subsequently in farmers to produce high quality agricultural and allied products in large quantity, so as to enable the farmers to get good price at local, national and international market, for raising their income. For capacity building purpose all related areas have been divided in to three broad categories as A) Areas in which knowledge is required B) Areas in which knowledge as well as skill is required and C) Areas in which skill development is required. The different methods/Procedure of building the capacity of extension personnel/farmers are 1) Training 2) Guidance by extension workers 3) Exhibitions 4) Farmers fairs 5) Extension literature 6) T.V/Video film show 7) Radio 8) News papers

9) Fellow farmers 10) Field Visits 11) Computer/internet access 12) Field campaigns 13) Demonstrations 14) Skill teaching sessions 15) Practice sessions 16) Lecture/talk 17) Group discussions 18) Market survey 19) Role plays 20) Cooperative training etc...

The infrastructure required for building the capacity of the extension personnel and farmers are 1) State departments Extension Staff 2) State department training institutions 3) State Agricultural Universities 4) Extension education institutes 5) Agricultural marketing training institutions 6) Cooperative training institutions 7) Anaj mandis 8) Vegetable mandis 9) Rytu bazars 10) Kisan Ki mandis 11) Private/Govt. computer training centers. The duration of capacity building in most of the areas is one week. However, the duration of capacity building in some areas ranges from 3 days to 15 days.

For capacity building the status of capacity of the extension personnel/farmers should be identified. Later on they should be deputed to the concerned institutions/training centers to get their capacity build in the required area/subject. This all should be planned and executed in a very sincere and systemic manner. If it is all done as describe above, the capacity of extension personnel will be improved and consequently the farmers will produce high quality agricultural commodities in large quantities, which will be comparable to international standards. The farmers of our country will be confidently competing in international markets. The farmers will get higher prices and income in the international market. This will not only facilitate the Indian farmers to face the challenges from WTO, but also help the country to get accumulated higher status of foreign currency.

References:

- Aulakh, K.S, 2001. "Future thrust in Punjab Agriculture and role of Punjab Agriculture University", p-5, progressive farming, March, 2001.
- Shah, A.K, 2000. "Challenges before Agricultural Extension in 21st century", p-3, Agricultural Extension Review, vol.ii, Jan.-Feb 2000.

Singh, Joginder, 2000. World Trade Organisation-performance and implications, a circular/lecture note.

Singh, R.P. Singh, 2000. "Management of training programme", Anmol Publications, Ansari road, Daryaganj, New Delhi, p-85.

Tripathi, B.D, 2000. Human Resource Development of Agricultural Extension personnel in new millineum; A prospective view, p-3, Agricultural Extension Review, March-April.