

# **SKILL DEVELOPMENT**

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## SKILL DEVELOPMENT IN VETERINARY EDUCATION

Skill development is not merely meant for farmers and entrepreneurs. It is also about having the needed skills among field practitioners. For instance, the main purpose of veterinary education is development of appropriate knowledge, skills and attitudes among veterinarians. But are we doing enough to develop the much needed skills required for field veterinarians? Lack of clarity on the different types of skills to be developed and absence of adequate infrastructure for skill development have led to poor skill development among veterinarians and this needs to change, argues SVN Rao.

**A** field veterinarian is expected to play two roles one as a clinician and the other as a livestock advisor. For a veterinarian both hard and soft skills are equally important. For instance, he/she must be a good clinician (hard skill) but also be good in interpretation of results for proper diagnosis (soft skill). Hard skills could be defined as well as measured and hence considered as tangible, whereas, the soft skills are intangible and difficult to quantify. It is comparatively easy to impart hard skills which are mostly physical in nature. The soft skills are to do with mind.

Skills such as Artificial Insemination (AI), surgical interventions, treatment of cases, analysis of samples etc are examples of hard skills. The examples for soft skills include, approaches on personality development, interpersonal communication (Interaction with clients, collecting history of the animal from the clients, building rapport with the clients etc), interpretations and diagnosis of cases, prescription, entrepreneurial skills etc. He/she also needs to be a good livestock advisor which involves mostly soft skills, necessary for effective delivery of livestock services. This is one of the reasons why very good clinicians with poor communication skills or poor personality often fail to attract the clients and also fails to develop rapport with livestock owners.

The skills could be placed on a continuum of very simple to very complex.

### Imparting Skills

#### Skills required for a veterinarian as a clinician

To acquire skill one has to learn certain things in a systematic manner. For instance, the veterinarian has to "diagnose and treat a case" successfully. This necessitates him to:

- Collect the history of the case from the owner
- Examine the animal for various clues which help in arriving at a tentative diagnosis
- Collect the required samples from sick animal (blood, skin scrappings, dung, etc.
- Obtain the required information through various diagnostic tools
- Combine all this with the help of his past experience to arrive at a diagnosis.
- Treat the case accordingly.

This means the veterinarian must have the following knowledge, skills and attitude:

- Skill to build rapport with client to collect proper history ( soft skill)
- Knowledge of the symptoms of a disease
- Skill to look for the symptoms in the animal (soft skill)
- Skill in interpreting the results of clinical diagnostic tests (soft skill)

## Box 1: Knowledge and Skill

Education is defined as the process of bringing about desirable behavioral changes in people. These changes could be in the areas of Knowledge, Skill, Attitude and Action (in short KASA changes). Knowledge is a body of information applied directly to the performance of an act. When once we use this knowledge for performing an act it becomes skill. Knowledge is information that we have in our head and skill is the ability to use and apply this knowledge to perform certain tasks. Knowledge refers to theoretical information acquired on any particular subject whereas; skill refers to the practical application of that knowledge.

Knowledge can be learnt whereas skills require practical exposure. Certain skills could be imparted through training in practical situations whereas, certain other skills could be inborn and difficult to impart through training. It is said that Skill gives teeth to the knowledge. Both knowledge and skill are required to perform an activity successfully.

Knowledge normally precedes the skill. A person must be definitely knowledgeable. Any skill must be acquired properly up to the required depth. Partial acquisition leads to poor application and it is often compared to a blunt knife. Individual variation exists among the trainees although the trainer and the situation in which the training was given are the same. If skill is not practiced regularly one may lose its touch. One may not forget it entirely but the fineness with which he does or applies varies. Practice makes a man perfect in that skill.



- Knowledge on various lines of treatment with degrees of success
- Knowledge on the prognosis of the case and cost of treatment
- Skill in arriving at an appropriate diagnosis (soft skill)
- Skill in administering the medicines or injections (hard skill)
- Skill in dealing with the clients (soft skill)
- Attitude towards the case as well as towards the client

Similarly to impart skills on “pregnancy diagnosis in cows” we need

- Trainer (Gynaecologist)
- Sufficient number of cows with varying gestation periods
- Interested trainees
- Appropriate place ( dairy farm)
- Other things like trevis, gloves etc.

Cases which require surgical interventions need different types of equipments and in the absence of which the surgeon is constrained to treat the cases effectively. As the saying goes “Practice makes a man perfect” we need to expose the students to a number of cases to enable them to get sufficient exposure to help them acquire the

skills to a required depth. The teachers will be using different methods singly or in combination to impart skills.

- Method demonstrations by the trainer
- Practicing on dummy animals ( for complex skills)
- Hands on training in situ
- Providing enough opportunities to enable the trainees to acquire skills in a farm/hospital and later in farmers’ field.

Knowledge is also sometimes construed as theoretical knowledge different than practical knowledge which is sometimes referred to as skill (applied knowledge). Knowledge could normally be imparted in a class room setting through training programme.

To train UG students on AI technique the following activities must be undertaken:

1. Knowledge of heat symptoms & stages of heat ( theoretical in class room)
2. Skill in identifying the cow in heat ( soft skill in ILFC/ TVCC)
3. Skill in examining the genitalia per rectum ( hard skill in TVCC)
4. Skill in determining the stage of heat ( hard skill in TVCC )

5. Loading the AI gun ( hard skill in TVCC)
6. Inseminating the cow ( hard skill in TVCC)

Once the students are confident in performing AI in TVCC they can be permitted to practice in ILFC and the field (farmers' animals).

As it could be noticed that to impart AI skill, we need infrastructure in terms of cows (both dummy/ condemned cows and healthy cows), AI equipment, Semen straws, LN2 containers etc in sufficient numbers to provide enough opportunities for the trainees to acquire the skills. For this reason the Veterinary Council of India (VCI) insists on Instructional Livestock Farm complex (ILFC) with different species of animals to help students to acquire both knowledge and skills in rearing animals through "earn while you learn" projects and Teaching Veterinary Clinical Complex (TVCC) which receive quite a good number of cases.

### **Skills required by a Veterinarian as livestock advisor**

If we wish to impart skills in organizing a "deworming campaign" we need

1. Extension professionals
2. Students
3. Development and use of communication aids such as specimens, charts, posters etc.
4. Organization of various materials like microscopes, slides, deworming medicines etc.
5. Coordination of various departments like Parasitology, Clinical medicine, State Dept. of AH
6. Appropriate location in the village(s) – open area to hold animals, place to keep microscopes, suitable place for exhibiting the specimens, posters, charts etc.
7. Logistics like transport, drinking water etc.

This involves meticulous planning of both men and material resources. The dairy farmers need to be sensitized for getting their animals dewormed, involve village leaders in site selection and local publicity, seek coordination of various departments, arrange for dung examination, administration of medicines, record keeping etc. All these activities must be done by the students while the extension faculty plays the role of facilitator. Excepting collection and examination of dung samples, restraining the animals and administration of dewormers, rest of the activities involve only soft skills. These soft skills include:

1. communication skills to build rapport with the village leaders and cattle owners,
2. organization skills to arrange for the materials at appropriate places,

3. skills to achieve coordination of various departments,
4. skills to resolve the conflicts that arise among the cattle owners( Group dynamics) etc.

To impart skills in organizing a method Demonstration of "Full hand method of milking" to the dairy farmers, we need

- Trainer or milker/students
- Few Milking Cows
- Interested farmers
- Appropriate place
- Other items such as milking vessels, milker rope etc.

The students must have:

- Knowledge about different methods of milking
- Skill in milking the cows with full hand method
- Advantages of full hand milking vis a vis disadvantages of knuckle method of milking
- Skill in organizing demonstration
  - ❖ Building up rapport with the dairy farmers
  - ❖ Winning trust and confidence among the dairy farmers
  - ❖ Identification of opinion leaders and key communicators
  - ❖ Selection of an appropriate place in the selected village
  - ❖ Skills to motivate the followers to participate in the demonstration
  - ❖ Arranging the cows in milk, milkers, milker ropes, utensils etc.
  - ❖ Skills to initiate discussion among the participants after the demonstration.
  - ❖ Skills to evaluate the impact of demonstration through arriving at the responses from the participants ( spot evaluation)
  - ❖ Skills to motivate the participants to come forward to acquire the skills in Full hand milking
  - ❖ Skills to cultivate the habit of full hand milking through farm and home visit
  - ❖ Net working of the participants to resolve the issues during the learning process and help other farmers to acquire the skills

Most of the extension related skills are soft in nature and these skills include:

- Communication skills to build up rapport with the farmers, collection of relevant data,
- Analysis of the farming situation, root cause of the farmers' problems,
- Selection of appropriate extension methods to interact with the farmers



- Winning the trust and confidence of the farmers
- Group dynamics- composition, structure and functions of various groups, leadership etc. to involve them in livestock development programmes
- Ways and means to help the farmers
- Preparation and use of various teaching aids
- Organization of demonstrations, on farm testing, impact analysis etc.

It is also equally important to assess the type of skills required at different levels viz., Livestock owners, para vets and vets.

### Constraints in Skill Development

There are no two opinions that more the exposure or opportunity provided to the students the better it is for them to acquire the skills properly. Unfortunately in many veterinary colleges the required skills are not being imparted mainly due to lack of or inadequate infrastructure in ILFC/ TVCC resulting in the students not able to acquire the skills in managing the farms or treating sick animals effectively. Shortage of trained faculty further aggravates the problem. This is one of the reasons why the veterinary graduates do not venture to establish livestock farms on their own as entrepreneurs.

### Way Forward

The ILFC and TVCC must be strengthened to provide ample opportunities for the students to acquire the skills. One or two veterinary Dispensaries (working under State Department of AH) which receive good number of cases could be converted into rural veterinary centres and must be

brought under the control of TVCC to increase the student exposure to more number of cases.

The 6 months rotator training could be flexible to suit to the options of the students. As on today, this is not happening in any veterinary college because we implement the internship programme in to without any deviation. The net result is that our graduates are incapable of working in large scale or commercial establishments. They cannot venture into farm business. Therefore this 6month training could be organized as follows:

- Assess the areas (dairy, poultry, goater, meat processing, Value addition etc) where there is a scope for the UG students to improve their skills.
- Prepare a list of students based on their interests.
- Document the list of entrepreneurs who wish to train our students.
- Invite these entrepreneurs for campus interviews for selecting their prospective students based on their interests.
- Accordingly the students could be attached to the respective entrepreneurs for a period of about 6 months.
- Negotiate with entrepreneurs for payment of stipend.
- The students who wish to go for advanced studies (MVSc) in particular disciplines may be given opportunities to sharpen their skills in colleges/ departments where such facilities are available. For example a student who wishes to go for small animal practice may be permitted to undergo training of 6 months in a TVCC or urban hospitals where turnover of small animal cases is good.



- Similarly the students who are interested in wild life may be sent to a Zoo for 6 months to provide enough opportunities to learn the skills required in wild life management.
- Those students who wish to become “jack of all master of none” could be given the existing 6 months internship programme.

This, I am sure will help the students to acquire the skills of their choice which enable them to get employed in the respective farms or processing plants and or embolden them to start enterprises on their own.

- **Entrepreneurship programme:** Some veterinary colleges are successfully implementing the “earn while you learn programme” to help students acquire the

required skills in their respective areas of interest. However, it has limitations in terms of the size of the farms and also the number of students to be accommodated. There is a need to increase the farm size, facilities in processing departments (LPT) to enable the students to acquire and sharpen their skills.

- **Extension skills :** The major constraints in imparting extension skills are inadequate faculty, poor infrastructure, lack of logistic support like transport to visit villages and ill defined curriculum to mention a few. As a result the students are not able to acquire the desired skills in extension and they as veterinarians are not able to play the role of “Livestock advisor” effectively. All these need to be addressed.

## SKILL DEVELOPMENT FOR A NEW RURAL RESURGENCE

Recent initiatives such as the National Skill Development Corporation have begun to address some of the needs related to skill development in various sectors. However, the needs of the rural areas, and those of agriculture/allied sectors are yet largely unaddressed. In this blog, Girish G Sohani illustrates some of his thoughts on skill development for employment, self-employment and enterprise development in rural areas based on the experiences of BAIF Development Research Foundation.

India today faces a massive skills deficit compared to the tremendous demand generated within all sectors of the economy – industry, construction, infrastructure on the one hand; and agriculture and allied sectors on the other. In order to address emergent needs and challenges in rural areas, there is need for an approach based on skills development as an important strategy.

### The Approach

In our view an appropriate approach for skill development in rural areas should contain the following key elements. (We propose this approach based on our experiences in this area).

- Rural Focus: Skills development for employment, self-employment and enterprise development in rural areas.
- Coverage of both farm-based and off-farm sectors.
- Delivery of skills development close to the setting of trainees.
- Open school system for certification.

Over the last few years, the BAIF (BAIF Development Research Foundation) has worked upon skills development programmes in agriculture, animal husbandry and land and water resource management (Box 1).

In the recent past skills development programmes have been started in construction technology areas such as masonry and bar Bending. Other potential areas such as plumbing and the hospitality sector (through rural-/agri-/eco-tourism) are also being explored currently.

### Sectoral Coverage

BAIF plans to leverage its existing knowledge base and experience in the above sectoral areas to put in place a skills-development programme focused on the rural sector (Table 1).

### Roles

A skills-development programme in all the above areas will require work on

- Development of contents and pedagogy in partnership with key institutes.
- Setting up an Assessment and Certification system in the open school system.
- Organize the delivery through a hub-and-spoke model and using ICT.

**Teams:** BAIF proposes a core team at a central level (at Rural Resource Centre for Skill Development) and extended teams at the delivery end (skill development centres) to design and implement skill development programmes.

**Table 1: Skills Development in Rural Areas: Scope and Levels  
(Illustrative Themes in BAIF Programmes)**

S. no.	Areas/Themes for skill building	Skills for Service-Delivery / Setting Enterprises	Upskilling of Practitioners
A	<b>Natural Resource Management</b> <ul style="list-style-type: none"> <li>Water Harvesting and Management</li> <li>Watershed Management</li> <li>Watershed Development Technician</li> </ul>	<ul style="list-style-type: none"> <li>Water Technicians (Turkey planning/installation of water pumping/application systems)</li> <li>Water Technicians (Maintenance)</li> <li>Handpump Technicians</li> <li>Microclimate Management: Shade Nets/Poly houses</li> </ul>	<ul style="list-style-type: none"> <li>Efficient Water Usage</li> <li>Improving Soil Health</li> </ul>
	<b>Agriculture/Horticulture</b> <ul style="list-style-type: none"> <li>Crop Planning</li> <li>Sustainable Agricultural Practices (SAP)</li> <li>Soil Health Management</li> </ul>	<b>Grafting of Horticulture species</b> <ul style="list-style-type: none"> <li>Nursery Raising</li> <li>Nutrition Gardens</li> <li>Systems of Crop Intensification (SRI, SWI, SSI)</li> <li>Seed Production</li> <li>SAP Input Production (including organic fertilizer)</li> <li>Soil Health Monitoring and Advice</li> <li>IPM</li> <li>IPNM</li> </ul>	<ul style="list-style-type: none"> <li>Farm Implements Maintenance</li> <li>Post-harvest handling of farm produce</li> <li>Crop Intensification / Diversification</li> <li>Soil Health Management Improved Fertilizer use efficiency</li> </ul>
C	<b>Livestock Development</b> <ul style="list-style-type: none"> <li>Dairy Cattle Management</li> <li>Goat Rearing Management</li> </ul>	<ul style="list-style-type: none"> <li>Artificial Insemination and Allied Services</li> <li>Buck-Rearing for Goat-Keeping</li> <li>Disease Diagnostics and Preventive Health Care</li> <li>Milk Handling and Preservation</li> </ul>	<ul style="list-style-type: none"> <li>Feed/Fodder Security</li> <li>Economic Milk Production</li> <li>Clean Milk Production</li> <li>Reproduction and Nutrition Management of Cattle</li> </ul>
D	<b>Forestry Based Livelihoods</b> <ul style="list-style-type: none"> <li>Planning for NTFP based livelihoods</li> </ul>	<ul style="list-style-type: none"> <li>Management of Young Silkworm Rearing (chawki)</li> <li>Running Silkworm Granages</li> <li>Post harvest operations on Sericulture Cocoons</li> <li>Raising forestry Nurseries</li> <li>Lac Cultivation Management</li> <li>Seed Lac Production</li> <li>Honey Processing</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable Honey Harvesting</li> <li>Improved Silkworm Rearing</li> </ul>
E	<b>Construction and other Appropriate Technology</b> <ul style="list-style-type: none"> <li>Assessment of Technology needs and Scope</li> </ul>	<ul style="list-style-type: none"> <li>Operating "Building Centers"</li> <li>Fabrication and Maintenance of Agricultural Machinery/ Implements</li> <li>Ferrocement Technology</li> <li>Bio-energy Technologies</li> </ul>	<ul style="list-style-type: none"> <li>Basic Construction Skills-Masonry, Plumbing and Painting</li> </ul>
F	<b>Community Mobilisation</b> <ul style="list-style-type: none"> <li>SHG Formation and Management</li> </ul>	<ul style="list-style-type: none"> <li>Book-keeping for Small Groups</li> <li>Accounting of Enterprises/Farmer Organisations</li> </ul>	

The resource center will provide technical knowledge base to other centers by shouldering responsibility of developing course material (in local language) for Instructors and demonstrators. The thematic experts (subject experts) at the central level will work on pedagogy of courses, develop a team of Instructors and demonstrators and also develop linkages with concerned universities and experts and involve them in developing the curriculum and certification of the course. They will organize:

**Curriculum Development Workshops-** Through these workshop experts from the related fields are brought together to develop curriculum of each course. The course curriculum will be developed on modular basis, in line with NSDC or open school curriculum.

**Development of audiovisual aids and training materials-** For effective transfer of knowledge, audiovisual aids will be developed as supplementary tool in training. They will be



## Box 1: BAIF Approach

Over the last 40 years BAIF Development Research Foundation ([www.baif.org.in](http://www.baif.org.in)) has worked on innovative approaches for livelihood generation in rural areas through Natural Resource Management and creating gainful self-employment through development of livestock, agriculture, horticulture and forestry. These programmes have positively impacted about 4 million families in a dozen States of India. Demystification of technology and capacity building of participants have been important planks of BAIF programmes. One important feature of BAIF programmes is the thrust given to participation of women, not as passive beneficiaries, but in active spearheading of development initiatives. The women are further organized into Self Help Groups (SHGs) which function as the social capital for development action.

BAIF programme have over 7000 SHGs (representing over 1 lakh families) and involved in micro-credit, contributing to better social security, absorption of technology and skills and promotion of enterprises. Through its programmes, BAIF team works with women SHGs as well as Common Interest Groups (CIGs) of farmers, which are further federated into second tier organizations which take up aggregate-level activities for supporting farming as well as engaging with markets. BAIF has been recognized as a study center by national and state level universities and open schools. For instance, BAIF is recognized as a Study Center for Natural Resource Management course under from Indira Gandhi National Open University (IGNOU) and has been undertaking various diploma and certificate level programs with Yashwant Rao Chavan Mukta Vidyapeeth, Maharashtra.

in the form of either standardized power point presentations, small 3-5 minutes films on good practices or processes or visual presentation. Considering the constraint of availability of uninterrupted electricity and internet connectivity, this material will be in the form of offline CDs. To supplement this, material in flex and print form will also be developed for each course.

**Training of Trainers-** A Core Faculty Team (CFT) will conduct Training of Trainers to suit requirements of various module. The duration may vary as per the course structure. The first batch of trainees in the first location can operate as Master Trainers (MT) for starting another center in new location.

At each Skill Development Center there will be one Center in charge who will take up promotional activities for sourcing of trainees and a small team for Instructors and demonstrators to impart training. The centres could develop partnership with the National Skill Development Corporation, the Open School System or similar other national level authority for assessment and certification of the courses offered.

## Way Forward

The Skill Development Programmes should have a rural focus and should offer trainings on farm based and non-farm based trades. It should focus on up-scaling the skills of practitioners and creating a cadre of service providers or for self employment. Each skill development centre should be organized in such a way that it has the capacity to cater to 10,000 trainees per year. Each Skill Development Center should select the courses depending upon the agro climatic conditions and need and the list will be revised every year to suit the demand of the local area. Each course may have around 20% of theory

and 80% of practical hands on experience and the medium of instruction should be the local language.

Having worked in livelihood creation for rural areas, BAIF has a small team of trainers at many locations who can be assigned this task. BAIF has strong field programmes in Uttar Pradesh, Uttarakhand, Bihar, Rajasthan, Madhya Pradesh, Chhattisgarh and Punjab where the Skill Development Centers can be established in association with local institutes having training facilities. We look forward to engage with the rural skill development initiatives of the Government and other agencies in the coming days.



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## SKILLING THE FARM SECTOR – NEED FOR A FOCUSED APPROACH

The focus of skill development in India by default is oriented towards industry and micro enterprises. Skill development in the farm sector is yet to receive due attention in the skill development efforts of the Government. A shift towards skilling the farm sector is long overdue, argues RM Prasad.

During 2008, India witnessed two draft national policies, namely, the National Policy on Skills Development (May 2008) and the National Employment Policy (August 2008). Subsequently, the final version of the National Skill Development Policy was published in March 2009. Another important draft report related to skill development “Skill formation and employment assurance in the unorganised sector” was also published during 2008 by the National Commission for Enterprises in the Unorganised Sector (NCEUS). Skill development of farmers and farm labourers is not recognised as a priority in all these documents, though half of the workforce in India continues to depend on agriculture.

### Box 1: Skill Development: Meaning and Focus

The major sectors of Indian agribusiness, namely, Biotechnology, seeds, organic fertilizers and pesticides, farm machinery and food processing are major sectors of Agribusiness witnessed significant growth in the recent years. Currently, India’s Agribusiness market size is estimated Rs. 17.44 trillion and it is growing at 9% per annum driven by captive domestic demand and export opportunities. Indian Food Industry is the largest growing category in India, accounting for 31% share of the consumer wallet; approximately twice as high as any other category (Srinivas, 2011). The private equity investments in Agribusiness as a percentage of total investments have grown to 3.8 per cent in 2012 from 0.2 per cent in 2008. During the same period, venture capital investments in agribusinesses grew from 0.2 per cent to 1.6 per cent of total investments (KPMG-FICCI, 2013).

### National Policy on Skills Development

Farmer and Farm Labourers are not considered as an important category for skill development in the Preamble and Vision of the National Skill Development System in India as depicted in this policy document. It appears that these categories do not fall in the ambit of skills development as per the framers of this national policy. However, to justify the stand that they are not completely excluded (to take care of inclusive development), under Chapter 5 “Skills Development for the Unorganised Sector”, a passing mention about the farmers in relation to target group is made.

Under skills development for self employment, the policy mentions that *“A large part of unorganised sector workers are engaged in informal entrepreneurship. Wage employment opportunities being limited and occasional, skill development for entrepreneurship is a priority. However, training should be a part of a*

*larger package of inputs- finance, technology, market information and access, and other support services. Accordingly, priority will be given to entrepreneurship skills development for the unorganised sector and provision of complementary inputs for success. Institutes for entrepreneurship development, technology incubation centres and such other institutional arrangements will be invoked and utilized to support successful adoption of entrepreneurship by unorganised sector workers."* Here also, it is quite disappointing to observe that farmers and farm labourers are not considered vital segments for skill development, as the policy is silent on the strategies for these prominent target groups.

Under 'Expansion of Outreach, Equity and Access' (Chapter 3), it is mentioned that *"for undertaking massive expansion in capacity, besides current established approaches, innovative delivery models will be explored such as public private partnership, decentralized delivery, distance learning and computerized vocational training"*. Though mention about Apprenticeship Training Scheme for the industrial sector is made, any effort about reaching to farming community for skill development is not evident. In the approach to deliverables, under delivery of skills, it would have been appropriate to mention about the need for skilling the farmers and farm labourers. A national policy on skills development cannot be comprehensive and complete without considered inclusion of the farmers and farm labourers.

## National Employment Policy

The context in which the National Employment Policy is mooted in *alia* covers the following:

- Over half of the workforce continues to depend on agriculture, even though it accounts for less than a fifth of the total GDP. This implies a vast gap in incomes and productivity between agriculture and non-agriculture sectors. This is mainly due to inadequate growth of productive employment opportunities outside agriculture.
- An overwhelming majority of workers are currently employed in the unorganised sector where most of the new jobs are also created. In addition, most new jobs that are being created in the organized sector are informal in nature. These jobs are mostly characterized by low earnings, poor conditions of work and lack of social protection and organisation.
- A large number of workers, whether wage employed or self-employed earn below poverty line incomes and are 'working poor'.

Though the context is properly described, well

thought out strategies for enhancing the skill of farmers in undertaking farming as a business are not indicated. In the context of shortage of farm labour, the need for imparting skills to farm labourers and organising them by way of Labour Banks as done successfully in some pockets of Kerala, could have been a viable and workable strategy. However, the policy is silent on such vital issues.

The employment policy also recognises skill development as an important component of active labour market policies of the Government and addresses the issue in relation to three aspects, viz., matching training with demand, standards and certification and linkage with education system and other programmes. The important policy statements are:

- Labour market information systems will be set up adequately to annually assess the labour market requirements, identify labour-intensive high-growth sectors, so that skills development can be planned and delivered accordingly to meet the demands.
- The focus on skill training and development will fall on the informal or unorganised sector of the workforce. Appropriate programmes and schemes will be developed and introduced throughout the country to meet the requirements of such workers.
- Greater involvement of industry in various initiatives is crucial. To ensure greater involvement and interaction, existing and successful models will be assessed and their replication with appropriate adaptations will be taken up.
- Skill training and development will be made an important component of public programmes and schemes especially those focused on a large number of beneficiaries such as the National Rural Employment Guarantee Programme, National Rural Health Mission, *SarvaShikshaAbhiyan*, Integrated Child Development Service (ICDS) and Mid-Day Meal Programme.

Here also, there is no focused and sharp policy instrument prescribed for skill formation in the farm sector, thereby implying that agriculture as a sector is not viewed seriously for skill formation as in the case of industry and micro enterprises.

## Draft Report of National Commission for Enterprises in the Unorganised Sector (NCEUS) on "Skill formation and Employment Assurance in the Unorganised Sector"

Though the report is more comprehensive, here also the neglect of the farm sector is quite



evident. On the basis of the Commission's focus on the unorganised sector and the perceived need to view skill development a little differently (given the preponderance of this sector in the Indian economy), the Commission has laid out a detailed strategy and set of recommendations for revamping, expanding and reorienting the existing skill development system in India. It envisions *"the setting up of a system that lays out clear guidelines and a coherent organizational framework for the country as a whole, while focusing on decentralized, representative and need based delivery systems at the local level"*. However, there is no mention about the role of Krishi Vigyan Kendras (KVKs) which is one of the key players in the existing skill development system for agriculture in India.

The Commission is of the view that "all entrants in the labour force must be equipped with a minimum level of education which must be gradually extended to secondary level. However, simultaneously efforts have to be made to provide these workers with skill training through modular courses so that a significant part of the labour force can be imbued with formal marketable skills within a reasonable period of time. Unless this is done, this workforce will not be able to move on a trajectory of higher productivity and higher

incomes, with deleterious consequences for the development of the economy as a whole". Providing skill training through modular courses is a welcome suggestion. Here also, it is observed that out of the 340 Modular Employable Skill (MES) courses approved by National Council for Vocational Training (NCVT), only less than 10 per cent are found to be related to agriculture. In this itself, majority are related to repairs and maintenance of farm equipments and machinery, and do not cover skill sets related to production and post production farm technologies.

## Skill Development in 12<sup>th</sup> Plan

A presentation on "Employment and Skill development in the 12th Plan" by the Planning Commission, Govt of India highlights the action plan envisaged for the 12th plan period. The action plan gives thrust on manufacturing sector to bring in supportive policies to incentivise labour intensive manufacturing sectors such as textiles and garments, leather and footwear, food processing, gems and jewellery to generate more employment. The action plan also focuses on expanding employment in services like IT, tourism, trade and transport. However, agriculture as a sector for skill development does not figure in the action plan.

### Box 2: National Skills Development Corporation (NSDC)

Skills and knowledge are the driving forces of economic growth and social development of a country. In rapidly growing economies like India with a vast and ever-increasing population, the problem is two-fold. On one hand, there is a severe paucity of highly-trained, quality labour, while on the other, large sections of the population possess little or no job skills. In his Budget speech (2008-09), the Finance Minister announced the formation of the National Skill Development Corporation. The NSDC was set up as part of a national skill development mission to fulfill the growing need in India for skilled manpower across sectors and narrow the existing gap between the demand and supply of skills. NSDC aims to contribute significantly (about 30 per cent) to the overall target of skilling / upskilling 500 million people in India by 2022, mainly by fostering private sector initiatives in skill development programmes and providing funding. The National Skill Development Policy mandates that NSDC would set up Sectoral Skill Councils (SSCs) to fulfill the roles and responsibilities as laid down by NSDC. (<http://nsdcindia.org/>)

The UK India Education and Research Initiative (UKIERI) had established 16 Sector Skill Councils (SSCs), of which Agriculture Sector Skill Council is one among them. Whereas some of the SSCs like leather sector, electronics sector and IT sector have definite action plans prepared based on skill gap analysis, such an approach is not evident in the agriculture sector. It is seen that crop management and agricultural information management are two important focus segments of the in Agriculture Sector Skill Council (ASCI), which are very well taken care of by the various training providers in the agricultural system.

The ASCI was formally set up in September 2012 as affiliate body of National Skill Development Corporation. However, it has a long way to go

in identifying and addressing the existing skills gaps and meeting the emerging needs and demands of the farming scenario. It also lacks focus on skill development related to managing a pluralistic agricultural extension system, innovation partnership and business development and governance of innovation system, etc, which is the need of the hour. ASCI has recently signed a Memorandum of Understanding (MoU) for skills training in agriculture with the AgriFood Skills Australia.

## Way Forward

Skill development in the farm sector is yet to receive the due attention and proper projection in the skill development efforts of the Government. Until and unless this is given priority by the

policy makers, it is feared that the farming sector will remain neglected and sidelined from the mainstream skill development process now in vogue in India.

Measures that address the specific skill needs that occur at different levels of agro-industrialisation have to be initiated. The 12th Plan Working Group on Agricultural Extension for Agriculture and Allied Sectors (Planning Commission, 2012) has also recommended skill development in agriculture especially for leveraging youth for agriculture. Agricultural education and training (AET) system in India should respond to these challenges. Currently this is not a priority which is reflected in the lack of concerted efforts for skill development in the agricultural sector.

To start with, the activities of Krishi Vigyan Kendras (KVK) which were initiated as centres of skill development for the farm youth and practising farmers may be properly oriented and steps taken to revamp their functioning. In this context, it is worth mentioning that the Planning Commission (2005) had come out with a report for revamping the KVKs, which suggest various measures. One of the important recommendations is that the major aim of KVKs should be to assist in bringing about a paradigm shift from unskilled to skilled work. In fact, the Report of the National Commission on Farmers (NCF, 2006) argue for trainings by KVKs in the areas of post harvest technology, agro-processing and value addition to primary products to provide skilled jobs in villages. Some of the KVKs are already involved in skill development activities, but the importance of skill development clearly needs stronger articulation and increased funding support. Salient recommendations of the Task Force Report of Planning Commission (2005) and NCF

Report have to be implemented in letter and spirit.

Apart from KVKs, some of the NGOs, State Agricultural Universities and ICAR institutes are also undertaking skill development and entrepreneurship development training programmes. They should take a lead in establishing sector or sub-sector skill councils and/or accessing support from ASCI to organise skill development trainings.

There is also an urgent need to bring in convergence of the activities of the various line departments of the Government working for the farming community focussing on imparting new skills, deskilling and multi-skilling for developing an effective and efficient production environment. This is what is expected from the Agricultural Skill Council of India (ASCI). However, the ASCI has no functional relationship with the ICAR which is directing and supporting the KVKs. There is an urgent need to link the KVKs with the activities of the ASCI for effective skill development agriculture.



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