**Agricultural Education in India- An Analysis**

*A.K.Sarkar, Ex-Dean (Ag), BAU,Ranchi*

Education is indispensable for knowledge. Knowledge is power. Knowledge is strength. It makes a man perfect and guides the destiny to a large extent. Progress of Agriculture in India is closely linked with the education of the stakeholders. In recent times, due to increasing population and expansion of industries, we are facing acute shortage of agricultural land. Besides, water is becoming more and more scarce coupled with climatic aberrations. Crop loss has become common due to harsh climate in many parts of the country causing acute distress among the farmers and their families. Loss in crop yield & quality due to soil and water pollution, deficiency/toxicity of trace metals, and pest and disease incidence has become a major issue.

 Agricultural education is one of the three mandates of Agricultural Universities, the two others, being Research and Extension. There are 71 Agricultural Universities in India located in different states to impart Agricultural Education in India. This includes Agriculture, Horticulture, Forestry, Fisheries, Veterinary Science & Animal Husbandry. Indian Council of Agricultural Research (ICAR) provides guidelines and suggestions on various aspects of education from time to time for improvement. ICAR also provides ‘Development Grants’ to Universities based on the accreditation norms, performance, number of students and colleges etc. Some of the items of ICAR Development Grant are: organisation of seminar, symposia, curriculum development, laboratory requirements, sports and games, infrastructural needs, book grants etc. But, the state Governments provide major support to these Universities in terms of staff salary, infrastructure and contingencies etc.

**Major challenges**

Agricultural education must be relevant to the challenges being faced by the Agricultural sector both at the state and National level. Thus, it is desirable to focus on regional issues, centralised planning may not relevant to address the problems.

The desirable traits for agricultural graduates are: sound knowledge, self motivation, positive attitude, IT & communication skills, Agribusiness skills .The curriculum and its delivery must be proper. Curriculum needs changes and modifications from time to time based on the scenario of agriculture and allied subjects. For instance, in the present era, the curriculum must include topics such as :

Technological and skill development for women, market linkages of agricultural produce, sustainable use of natural resources, climate resilience, post harvest technologies and value addition, micro-irrigation, organic farming, pest and disease management, integrated farming system, residue management etc.

There is need for Institutional reforms. Three aspects need focussed attention:

1. Initiatives should have long term impact.
2. Focus on quality education and relevance.
3. Establish linkage with stake holders and market demand.

Some of the components of Quality Agricultural Education are:

1. Improving quality of courses being taught to students.
2. Instructional processes
3. Human centred development
4. Strengthening student support services
5. Strong work culture.

 Besides these, Agri-universities should offer non-formal vocational courses. Tie up with industry is important. Students must be linked to farms and farmers. Experiential learning and Rural Agricultural Work experience Programmes help students in Agri-entrepreneurship development. A few suggestions for improvement in our teaching programme are:

1. Introduce ‘Case studies’.
2. Greater emphasis on concepts.
3. Improve teaching skills.
4. Interactive teaching.
5. Emphasis on learning.
6. Emphasis on ‘practical’ classes.

**Need for a Changed Outlook**

State Governments must fill up the vacant posts of teachers. About 40 to 50 per cent sanctioned posts are vacant in SAU’s. Quality of teaching staff is very important. Selection based on Agricultural Research service (ARS) of ICAR is working well . Senior faculty members are quite often assigned administrative jobs, which hampers teaching considerably.

Proper incentive to students admitted in Agriculture must be provided . Among these:

1. Assurance to placements is important
2. Placement as in-terns in state-run agencies, line departments, training centres, NGOs, seed companies etc.
3. Inculcate professionalism in students
4. Regular placement of Agri-graduates in state Govt. jobs, Banks, Fertiliser Industry, Universities, Training centres etc.

 This will help in strengthening the Agricultural sector in terms of skilled human resources, transfer of farmer-friendly technologies and improving farm income.

Start-up ventures could be a new addition. Agricultural graduates need to be trained on how to prepare bankable projects on Agri-business/Agri-clinics. Recent report from MANAGE (2017) suggests that out of 100 Start –Ups, 90 have been launched by Agri-graduates, which is a very positive sign and needs to be encouraged.

To sum up, it is felt that only state or central assistance and support is not likely to improve the situation in SAUs. What is needed is ‘*motivation*’ by a group of dedicated teachers and bright students.This can bring about the desired changes, even in a short span of time.