

DAATTCs - A SUCCESSFUL INNOVATION IN TECHNOLOGY DISSEMINATION

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Agricultural extension involves the whole gamut of complex interactions between farmers, extension workers and researchers in the transfer of technology, eventually resulting in enhancing productivity and profitability to the farmer. This essentially involves testing, refining and dissemination of technologies flowing out of State, National and International Agricultural Research System.

Since independence, the main policy of Indian Agriculture has been to grow more food to meet the demands of the ever growing population. As such, our production has been sufficient enough to meet the domestic requirements, from field to mouth. Hardly any effort has gone towards post harvest management and value addition. The objective has been to meet the demand for quantity with not much attention on the quality, both physical (sanitary) and chemical. To meet upcoming challenges of WTO, we now should be able to not only produce more, but also aim at improving the quality and capability of the production system. The extension agents will need to play a more proactive and participatory role and serve as "Knowledge/Information agents".

With the implementation of T & V system and reorganization of research activities under NARP, Acharya N.G. Ranga Agricultural University (ANGRAU) streamlined the set up of field extension during 1982 by establishing Extension Education Units in each of the agroclimatic zones.

Extension service through Extension Education Units was confined to either the main centre or to the Regional centres of the University and concentrated in few areas. The need of the hour is to reach the unreached. Agricultural extension at present is focused on commodity oriented macro-level technologies, while the need is micro farming situation based on location specific, problem oriented interventions. It is in this context that the farmer - scientist interaction brings in high degree of confidence among farmers. In order to reinforce and strengthen this mode of working, the University has

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reorganized its extension wing by locating the scientists at the district headquarters and operate in close collaboration with all the line departments.

Accordingly, 22 District Agricultural Advisory Transfer of Technology Centres (DAATTCs) were established during Rabi 1998-99 at each district headquarter, located in premises of Agricultural Market Committee (AMC), with a multidisciplinary team of 4 scientists (crop production, crop protection, TOT and Animal Husbandry/Home Science). The present paper explores the concept of DAATTCs and its performance.

Objectives of DAATTCs

DAATTCs were established to establish liaison with all the stake holders in the district; assist in implementation of RAWEP; maintain a useful agricultural information centre; and coordinate with AIR, TV and print media for dissemination of information. To realise the objectives, DAATTCs are mandated to develop database for developing action plans; assess and refine technologies generated by the research scientists for suitability to different farming situations; conduct diagnostic surveys, identify field problems and provide scientific solutions; organize Kisan Melas; extend scientific expertise to the line departments in training programmes and preparation of information materials.

Organisational Arrangements

DAATTC is an independent unit. One of the senior members of the centre is designated as 'Coordinator of DAATTC' to head the centre with administrative, financial and drawing & disbursement powers. The centre is under the overall technical and administrative control of Associate Director of Research of the zone concerned who in turn is responsible to Director of Extension on extension activities of each district centre in his jurisdiction.

a) District Level Coordination Committee

The District Level Coordination Committee (DLCC) for each DAATTC is constituted to oversee the functioning of the centers in planning, coordination, execution, and midterm review of its programme.

The District Level Coordination Committee is chaired by the Associate Director of Research of the region with coordinator of DAATTC as the Convener. The Members of the DAATTC are the Joint Directors of the line Departments / District level officers of the line Departments, Farmers representatives (one from each enterprise viz. agriculture, horticulture, animal husbandry, fisheries etc.), Representatives of Input Agencies (2) and Representative of NGO (1).

This Committee will decide joint action plan of DAATTC to suit the farm and farming systems of the districts. It will meet twice in a year, once before each season to decide seasonal joint action plans, to review the work done in the previous period and suggest improvements needed. The heads of concerned line departments of the district prepare their action plans for the district and discuss and finalise for implementation.

b) State Level Coordination Committee

The State Level Coordination Committee is headed by Vice-Chancellor, ANGRAU with Director of Extension, ANGRAU as Convener. The Members of DAATTC at State Level are Directors of Line Departments of Agriculture, Animal Husbandry, Horticulture, Sericulture, Fisheries and Women Development & Child Welfare; Director of Research, ANGRAU; Director of Research (Vety), ANGRAU; Dean of faculty (Agriculture, Veterinary and Home Science), ANGRAU; Associate Directors of Research, ANGRAU and three farmers (One from each region nominated by the Chairman of the State Level Coordination Committee).

The SLCC will meet once in a year to review the performance of DAATTCs in the State. It has the main mandate to coordinate, plan, review and supervise the functioning of DAATTCs.

Performance of DAATTCs

The significant highlights of the extension activities carried out during 2000-2001 and 2001-2002 through DAATT Centres, are summarized and presented activity wise hereunder:

1. Database development

District wise database on land utilization pattern, crops, cropping systems, productivity levels, soils and soil health problems, animal health have been documented by the DAATT Centres. Production constraint analysis has been made and production constraints have been listed crop wise and cropping system wise for planning technology assessment and refinement programmes effectively. The opportunities for alternate remunerative crops, contingency cropping plans have also been included. The database developed was found to be very useful and the KVKs are also utilizing the database created by DAATTCs.

However, the district database is not sufficient to meet the location specific requirements of the highly diverse micro farming situations. In order to generate location specific technologies and their adoption, micro level database is essential. An effort in this

direction was also made to develop Mandal wise - Farming situation wise cropping plans coupled with production constraints, opportunities for remunerative alternate crops and contingency plans. Farming situation based extension has been initiated as per the data-base developed.

2. Technology Assessment and Refinement (TAR)

"On-station research-adaptive research-extension" is a continuum culminating in the generation of profitable technologies to the farmers. Technology refinement and development are crucial intermediate steps between research and extension to develop location specific/relevant technologies for adoption. The yield gaps between technologies generated by researchers at Research Centres and the farmers field conditions are attributed to inadequate extension efforts. This has been traced to the unsuitability of the production recommendations flowing out of the Research Stations. Hence, technology assessment and refinement under farmers field conditions assumes greater importance as one of the main concerns of DAATTCs.

Some of the significant results under TAR activity which helped development of the following relevant technologies were:

MTU 1032 rice; Cotton hybrids LAHH-4, NSPHH-5 for coastal districts and NDLH 240 in Cuddapah and NDLH 1588 in Kurnool; Cotton variety "Narasimha" in Northern Telangana region; Application of Potassic fertilizers (resulted in 18% yield increase) in Turmeric in Cuddapah district; Direct seeded paddy yielded on par with transplanted paddy in West Godavari district during Rabi.

3. Diagnostic Surveys

Periodic diagnostic surveys and timely advice to overcome the maladies identified has been one of the most important activity of the DAATT Centres. In order to make the diagnostic surveys effective, a training programme was organized for the scientists working in the TOT centers on the survey and surveillance procedures to diagnose pests and disease incidence correctly. Major problems handled through diagnostic surveys included Peanut stem necrosis virus disease in Anantapur district; Eryophid mite on coconut in coastal area; Heliothis on cotton; Wilt/rot on sweet orange; Panicle mite on rice in East and West Godavari districts; Maruca on blackgram in Krishna delta; Spingid beetle on greengram in Guntur and Krishna districts.

4. Capacity building of stakeholders

A large number of training programmes covering almost all important crop produc-

tion and protection technologies were organized by DAATTCs with a view to build the capacity of farmer, farmwomen, youth and extension functionaries including NGOs and input agencies. The objectives of training were mainly to educate the stake holders on reducing cost of cultivation by 15% and increase production by 15%. The training programmes also covered the areas under Dairying, Poultry and Home Science. Table 1 shows details of training programmes conducted from 2000 to 2004.

Table 1. Training programmes conducted

S.No	Particulars	2000-2001		2001-2002		2002-2003		2003-2004	
		No.	Beneficiaries	No.	Beneficiaries	No.	Beneficiaries	No.	Beneficiaries
1	Extension personnel	65	3269	59	1450	88	3004	150	7029
2	Farmers and farm women	259	12568	362	17230	322	13998	309	11219
3	NGOs and input agencies	115	10816	103	8211	115	11104	170	9033
4	Skill teachings	334	4266	156	3187	184	5912	227	4585
5	AMC level farmers training	719	169006	537	140361	462	26502	199	11467
6	Rythu Sadassus	113	17571	102	16825	156	23626	104	22438
7	Group discussions	212	3804	270	5190	306	7812	385	8487
8	Field days	51	2981	76	2899	86	3897	61	3745

5. Mass Communication

The extension reach of ANGRAU has improved tremendously with the establishment of the DAATT Centres. Based on the field problems identified, the technological recommendations and the success stories are frequently communicated through mass media. Table 2 shows details of mass media efforts taken up from 2000 to 2004.

Table 2. Mass Communication Efforts

S.No.	Particulars	2000-2001	2001-2002	2002-2003	2003-2004
1.	Press Notes	600	698	1007	1039
2.	Publications (Popular Articles)	125	131	103	113
3.	Radio Scripts / Talks	268	234	237	368
4.	T.V. coverage	130	142	247	477

The contribution of DAATTC Scientists for Annadata-Velugubata (ETV) and Rythu Mitra (Teja TV) Programmes is notable. The pest and disease outbreaks identified in the farmers fields are received at the Directorate of Extension, ANGRAU, through Fax and are being telecast along with recommendations through Rythu Mitra programme on the same day.

Conclusion

The DAATTCs established by ANGRAU by reorganizing its Extension Education Units, are performing well to the satisfaction of the stakeholders in the process of agricultural development and have received accolades from all the concerned particularly from the farming community.

References

ANGRAU (1999). Extension highlights (1998-99), Hyderabad.

Angrau (2001). Extension highlights (2000-01), Hyderabad.

ANGRAU (2002). Extension highlights (2001-02), Hyderabad.

Srinivasa Rao D (2000) A study on the Role of ANGRAU DAATT Centres in selected districts of Krishna Godavari zone of Andhra Pradesh. M.Sc (Ag) thesis submitted to ANGRAU, Hyderabad.

Subba Rao I V and Satyanarayana A (2002) Transfer of Technologies in the context of WTO. Paper presented at 27th Convention of Indian Agril Universities Association held during 9-11 December 02 at ANGRAU, Rajendranagar, Hyderabad.