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*Dr Rasheed Sulaiman V recently sat down with Dr Sadamate to discuss the current state of agricultural extension in India and what needs to be done to improve the situation.*

**One of the major reforms in extension in India during the past two decades has been the establishment of ATMA (Agricultural Technology Management Agency) and you were involved in this process since 1997. When you look back, what have we really achieved through ATMA and is it addressing the major challenges in extension delivery in India?**

ATMA as a district level agency for bottom-up planning and coordinated extension delivery has expanded to all the districts in the country from the 28 pilot districts in 7 states where we tested ATMA initially during 1998-2005. Though ATMA experienced some major issues with respect to lack of dedicated manpower and limited resources (when it was scaled-up through a centrally sponsored scheme “Support to State Extension Programmes for Extension Reforms” in its first phase since 2005-06), most of these issues were addressed subsequently. The scheme was later scaled-up during the Tenth Plan period. Currently, ATMA has dedicated manpower for organising extension reforms and it has a significantly higher funding support. ATMA is a major programme under the National Mission on Agricultural Extension and Technology (NMAET) too in the Twelfth Plan.

ATMA has definitely contributed to improved visibility of extension at the district and block level through enhanced presence and by responding to priorities identified at the block level and below. However even with additional manpower including the “farmer friend” (identified and trained by ATMA), it alone cannot reach farmers everywhere and also address their diverse extension needs. ATMA needs to identify areas and activities where other organisations can support extension and have to enhance their capacities. Without this, ATMA or any other agency such as Krishi Vigyan Kendra (KVK) would not be in a position to independently address all challenges in extension delivery. Under ATMA, states are only bearing 10% of the total budget. 90% of ATMA funding is borne by the central government. The central government intends to reduce this share to 50% and I am not sure how the states are going to respond to this. Over the last two plan periods, ATMA has evolved as a full-fledged organisation, but it has to go beyond boundaries and play a major role to make a significant difference in extension delivery in agriculture and allied sectors.

**The importance of strengthening ATMA-KVK linkages have often been talked about, but is this really happening? KVKs are also represented in the ATMA Governing Board. But is it really leading to collaborative action and supporting each other?**

Performance in this regard varies widely. The NMAET needs to give adequate thought on strengthening these links. NMAET is mostly focussed on continuation of ATMA and other programmes/schemes that

are implemented through the Directorate of Extension of the Department of Agriculture and Cooperation (DAC) and the National Institute of Agricultural Extension Management (MANAGE). But wherever ATMA and KVKs are collaborating well, the experience has been mutually rewarding. Working with the KVK has helped improve ATMA's access to relevant technologies and also helped it to enhance the capacity of its staff. KVKs have benefitted by way of accessing much needed crucial grants from ATMA for some of its activities and working together also enhanced its reach to more number of villages in a district (beyond what is possible with their funds and limited manpower). However, one should note that even with high levels of collaboration, KVKs and ATMA together cannot address all the diverse needs of farmers for information, knowledge and services, unless and until they promote the involvement of other agencies such as farmer friends, farmer entrepreneurs, retired agricultural scientists and extension professional available in the locality, farmer organisations, farmer field schools etc in extension activities.

**Over the past few years, the central government investments in extension have increased considerably. Apart from specific support to extension to states through ATMA, there are other schemes such as RKVY, NFSM, BGREI, NHM etc, where there are specific provisions for undertaking extension activities. But are these investments helping the states to strengthen their extension activities?**

At the district level, ATMA and KVK are the two major organisations engaged in extension delivery. Ideally the major missions should fill the gaps in extension delivery which these two agencies are unable to fill. Schemes such as RKVY (*Rashtriya Krishi Vikas Yojana*) have provided additional money for extension activities to KVKs in states such as Jharkhand and West Bengal. Many of these missions/schemes also provide money for training and demonstrations through the line Departments such as the Department of Agriculture, Department of Horticulture, State Horticulture Mission etc. But these are seldom integrated with the activities of ATMA or KVKs. Policy interventions to address these issues have to come from the ICAR Zonal Project Directorates or through the SAMETIs so that these additional funds for extension are effectively linked to the KVK and ATMA interventions at the district level and below.

**Apart from increasing the financial support for undertaking demand led extension activities, ATMA has helped in increasing the manpower for extension (BTMs and ABTMs). Is the availability of dedicated staff for extension really leading to greater impact by way of increased productivity and farmer income?**

Yes, dedicated staff for ATMA has been provided (for example, Project Director (PD), Deputy Project Director, Block Technology Manager (BTM), Assistant Block Technology Manager (ABTM) etc). Though the BTMs are the contractual employees but yet they are dedicated staff for ATMA. But these need to be multiplied by other means like farmer friends, farmer entrepreneurs, farmer organizations or farmer field schools etc, and these should be promoted by the core ATMA staff. ATMA on its own, with around 40-45 core staff (assuming there are 10 blocks in a district and every block has 3 ABTMs, 1 BTMs and 1 PD and 2 Deputy PDs at the district level) may not be able to do much difference on their own. This 40-45 staff should work to multiply their efforts through enhancing the capacities of farmer friends, farmer organizations, field schools, farmer entrepreneurs, farmer producer companies etc., if they have to achieve significant impact. One should also explore the strengths of the Panchayati Raj Institutions (PRIs).

## **What about Information Communication Technologies (ICTs)? Everybody is talking about using ICTs in extension. Can these help in improving outreach?**

ICT is a wonderful tool for extension. Where person to person contact is not feasible, ICT can take over and perhaps that can help in reaching out large number of farmers with information on agriculture and allied sectors. However one should note that interpretation of ICT messages and translating those messages into specific action relevant for farmers often need human networks (eg; could be farmer organisations, e-choupal or farmer field school). Merely putting information on the website or sending SMS alone is not enough especially when you are dealing with complex problems. Government of India is also investing heavily on use of ICTs in agriculture. M-kisan portal, Kisan Call Centres and the much recent Kisan television channel (DD-Kisan) are all initiatives that focus on use of ICTs.

## **How can KVKs support building the capacity of farmer friends working at the Panchayat level?**

Capacity building of farmer friends should be core function of KVK, which is already happening in some states. Ideally KVKs first priority for training should be the farmer friends of ATMA. KVKs should also chalk out programmes for mentoring the BTMs and ABTMs. ATMA should focus on the proper selection of farmer friends and upgrade quality of their training programmes through KVKs. This would impact agricultural production and income of the farmers.

## **SAMETI (State Agricultural Extension Management Training Institute) was yet another major institution that was set up at the state level, mainly for building capacities of extension professionals. But the general impression is that well trained faculty who have expertise in specific themes are not available in all the SAMETIs thereby impacting the quality of training programmes being implemented. Is this true?**

The growth of SAMETIs is skewed because of many factors such as resources the states are willing to invest, the available infrastructure and mostly the leadership. The intention was to have a three-tier structure for staff training, with MANAGE at the national level, Extension Education Institute (EEI) at the regional and SAMETI at the state level. SAMETI ideally should be an inter-departmental agency cutting across the departmental boundaries and offering highly specialised training programmes with critical management input. All the SAMETIs would need to have specialised staff and effective leadership.



I personally believe that MANAGE and the EEIs should play a major role in mentoring the SAMETIs and also in evaluating their performance. The Zonal Project Directorates (ZPDs) could also play an important role here. The ZPDs of ICAR and the Head, SAMETI should interact more on the types of trainings, training strategy and also development of programme guidelines on streamlining the human resource development activities of ATMA, KVKs and Farmer Training Centres, and so on.

## **Over the past two decades, extension in India has become more pluralistic. Agri-business companies, input agencies, NGOs, Development Foundations, Producer Organisations etc are all investing resources to strengthen specific extension activities in specific crops/commodities and regions. What are your views on these developments?**

Yes, these should grow, as public sector alone cannot service the diverse needs of farmers for new knowledge, support and services. ATMA or KVK can't reach everywhere and do not have the resources

to address all issues. They should enable others to support farmers effectively. There should be space for everyone but there should be a mechanism to define the contours. It needs coordinated efforts. The Twelfth Plan Working Group on Agricultural Extension has clearly emphasised the role of ATMA in coordinating and supporting the development of an effective pluralistic extension delivery.

**We have been talking about Public-Private Partnerships in extension for some time. But it seems it hasn't moved much beyond the pilot experiments that were tried in during the late 90's and early 2000. Why is this so?**



As you are aware, ATMA has a provision to use 10% of its resources under Public-Private Partnership (PPP) but this allocation is currently highly underutilized by the States. To support development of location specific PPP arrangements, clear guidelines are needed. The existing guidelines in this regard would need to be reviewed first. There is one more mechanism to promote extension pluralism. There is funding provision for mobilization of farmers' organization and farmer interest groups. Perhaps, there is a need to review this provision to promote speedy utilization of the same, thereby enabling large number of such entities to emerge especially at the cluster and village level to play an important role in extension process.

**While a lot is emphasised in terms of training extension workers/staff, there is very little emphasis on developing new capacities at the organisational level among extension providers. We need more of a "change management" strategy for reforming organizations such as the state Department of Agriculture or the Directorate of Extension of State Agricultural Universities (SAUs). Is this happening currently?**

Yes, you are right, new capacities are needed at the organisational level too but this hasn't got the priority it deserves. Capacities for visioning, coordinating pluralistic extension delivery, knowledge management etc need to be enhanced at the organisational level. We need to have a change management strategy for extension services, and MANAGE, EEI and the SAUs should jointly develop this strategy in consultation with SAMETIs, ZPDs, Line Departments etc. Even the role of the Directorate of Extension at the SAU level should be reviewed keeping in view (a) the new challenge in extension delivery, (b) the emergence of new structures such as ATMA, SAMETIs etc, and (c) the increasing pluralism in extension delivery.

**But evaluation and reflective learning remain weak in extension. Is it so?**

Monitoring and evaluation of extension programme needs improvement. In most cases, we even do not have an inventory or a database of organizations involved in extension, both public and private, or the programmes implemented by different agencies /missions etc. Even the data on the number of people engaged in extension need to be updated. Only when we implement external funded programmes such as NATP, we create mechanisms to do this systematically. Similarly there is a need for a mechanism to learn and reflect on the progress of implementation and take midcourse correction. We need to strengthen policy level research on extension. MANAGE, EEIs and ZPDs should collectively address this weakness.

## **How do you think that the capacity of extension providers (both public, private and NGOs) to deal with emerging challenges could be further enhanced?**

We need to have capacity development framework for extension. The Twelfth Plan Working Group on Agricultural Extension (Planning Commission, India) has highlighted the need for 10-day annual training for every extension provider which should be linked to a pre-decided career progression plan. We need to implement this recommendation urgently. Competency certification of extension providers is a good idea. But mechanisms to identify these core competencies at different levels strengthen these capacities and certifying these needs to be put in place. Extension agents need a lot of functional skills related to facilitation, mobilisation and partnerships to meet the new challenges. Technical knowledge to deal with new challenges is also important.

## **But what about extension in allied sectors such as Animal Husbandry and Fisheries, where extension focus is limited and there are very few personnel to deal with extension?**

Extension is generally weak in Horticulture, Animal Husbandry and Fisheries—despite their significant contribution in Agricultural GDP. Several of the AESA (Agricultural Extension in South Asia) blogs have clearly articulated the problem. This was also noted by the Eleventh Plan and Twelfth Plan Working Groups on Agricultural Extension too. We initially thought the additional funding through RKVY available to states would be utilised to strengthen extension activities in these sectors. But if you look at the details of projects funded through RKVY (available with the Planning Commission and Department of Agriculture and Cooperation websites) you can note that not more than 1% of projects sanctioned under RKVY deal directly with strengthening extension services.

## **What could be the reason behind this?**

Allied departments haven't fully recognised the importance of extension as a critical function of enhancing the contribution of other activities they are engaged in. Sometimes, I feel we as extension professionals have failed to market our profession very well. In the case of Animal Husbandry, many perceive extension to be about organising vaccination camps, cattle fair and artificial insemination service. There is no proper mechanism at the field level to understand farmer priorities, analyse field problems, provide feedback to researchers, provide problem solving support, engage in technology adaptation, promote fodder cultivation or educate about preventive health care of animals. In the case of Horticulture, there is a lot of money under strengthening infrastructure and distribution of planting materials, but very little for extension. Greater clarity and more focus of these several missions (Horticulture Mission, Food Security Mission, etc) with reference to extension is needed. Extension is also important to add value to all the investments being made under these different missions.

In the case of fisheries, I was part of a recent small group exercise at the Central Institute of Fisheries Education (CIFE) that developed an outline on ways of strengthening fisheries extension. The small group comprised of representatives from the Indian Council of Agricultural Research, National Fisheries Development Board, Department of Animal Husbandry, Dairying and Fisheries and Bay of Bengal Programme. The plan was to organise a national consultation based on this outline, but there hasn't been any progress in this line after this initial exercise. The same is the case with Animal Husbandry though some of us who are interested in extension have been requesting the National Dairy Development Board (NDDB) to initiate specific programmes for strengthening extension. These areas need to be re-visited soon to look at specific extension issues affecting the sector.

**It appears that we don't have anything beyond ATMA and KVKs to offer to extension manager? Ideally we should have many specific models, approaches or options to offer to extension managers so that they can adopt whatever that suits their specific situation?**

Though there are different methods of extension, say for instance, demonstrations, trainings, exposure visits, farmer field schools, farmer group approach, mobilising farmers into producer companies, farmer to farmer extension, use of farmer volunteers, local service providers, different ICTs etc, there is no academic input that guide extension personnel to select the appropriate approach that suit the specific local context. In regions, where farmers are facing a lot of distress (where there are large number of farmer suicides) you might need an altogether different approach. Extension personnel should have the knowledge of the merits of these different approaches, what it costs and the ability to choose from several different options. We can't simply load everything to ATMA or the KVKs. There is need to have flexibility in the present extension setting to visualize or foresee the emerging situation and respond locally. There is no academic support to guide extension professionals on these aspects and here comes the role of research in extension and proper application of the findings.

**SAUs and deemed universities such as IARI are all engaged in extension research. Extension scientists in ICAR institutions also do research in extension. But is this research offering policy or programme relevant advice to extension professional or to be more precise senior extension managers or policy makers?**

Yes, of course, there is a lot of research going on in extension. But most studies collect data from limited number of villages and farmers. This is only one part of the problem affecting its relevance to policy. The second issue is how these results are communicated to those who matter. It seems no specific efforts are taken to inform or to transmit these research results to extension managers even in the state or neighbouring states where they work or they do research. Few weeks back I was listening to the presentation by IARI scientists on their research projects and these were the issues I raised. There are no research projects on issues such as evaluation of ATMA/KVKs, convergence of schemes, performance of various missions in the context of extension needs, varied performance of same models in different states (eg: Producer Organisations in extension), role of Panchayati Raj Institutions (PRIs) in extension, how PRIs could be interlinked to ATMA and KVK activities, etc, which are all very relevant for guiding and shaping extension reforms.

**Perhaps the clients of extension research are not well defined?**

National institutes having national/regional mandate should have been ideally engaged in Pan India or regional research (involving few states). But as of now all are engaged in village level studies, collecting extension data from limited number of villages. If one has to do policy relevant research on bigger issues affecting agricultural extension, one should engage with the ZPDs and SAMETI too. One should interact with the senior managers of different missions, departments and ministries and also the large number of private sector and NGOs involved in extension and advisory provision on how research in extension can help them perform better. But I don't think they are any kind of interaction among these agencies even in places where they share offices in the same town or campus. Ideally institutions like IARI could have provided leadership in this area of Extension research. Professional societies in extension are also not doing enough to address the declining quality and relevance of extension research. As a profession, our linkages with universities engaged in research and training in extension needs substantial improvement in the years to come. Neither MANAGE nor IARI Extension Division have international linkages at present which are important for faculty development. The extension models in operation in



various countries need to be studied, merits identified and lessons drawn for internalisation in the present formats. Perhaps, IARI and MANAGE could think on this.

### **Finally where should we go from here in strengthening the contribution of extension to agricultural development?**

I think we need to develop synergy at the national level between the ICAR Extension Division, the Directorate of Extension at the Department of Agriculture and Cooperation, IARI Extension Division and MANAGE. We need to have a forum that would discuss the policy relevant issues in extension at regular intervals and take the needed steps related to research and capacity development to address these. Similar arrangements are also needed at the level of EEIs, ZPDs, SAMETIs and Directorate of Extension at the SAUs. As pointed out by many in AESA blogs, we need to reflect on the role of professional associations (we have many) in extension and we need a consensus on how to bring about coordination among these agencies in handling professional matters (conduct seminars and conferences, publication of journals etc). I could see many young professionals in our discipline have started voicing their concerns and writing about ways of improving the contribution of our discipline through AESA blogs and I am finding it extremely useful. I hope more among us contribute their views through these forums and this would lead to concrete action at the national, regional and state level.

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