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## Adarsha rythu extension scheme of Andhra Pradesh: A critical analysis

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### Abstract

Adarsha Rythu Scheme is a grass root agricultural extension scheme implemented in undivided Andhra Pradesh from 2009 to 2014. Adarsha Rythus are the lead farmers who are identified as grassroots level nodal functionaries between farmers and permanent extension functionaries. They are tasked with bridging the gap between Research and Extension, passing on market-related information, government schemes related information etc to farmers. The Adarsha Rythus faced various challenges in effectively performing their duty. The major problems of these grass root level functionaries are lack of capabilities in disseminating technological and farming techniques and lack of accountability towards farmers. In this article, author analysed various dimensions of Adarsha Rythu scheme.

**Keywords:** adarsha rythu, agricultural extension, Andhra Pradesh, critical analysis

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### Introduction

Agriculture extension is defined in various capacities by various people: Birner, Davis, *et al* (2006) <sup>[5]</sup> defined it as the entire set of institutions that support and facilitate people engaged in agricultural production to solve problems and obtain information, skills, and technologies to improve their livelihoods and well-being. An advisory service also implies a service orientation and a move away from top-down models of technology transfer.

Adarsha Rythu Scheme is one such Agricultural extension scheme. Adarsha Rythu's are lead farmers. They were selected from various Panchayats throughout the state at the rate of one from every 200 to 250 farmers. The main objective behind the identification of Adarsha Rythus is to introduce a nodal functionary between the farmers and the Extension Staff of Agriculture and other Line Departments to help in bridging the gap between the Research and Extension. The success of the important intervention of the government lies upon the development of mindset of the Adarsha Rythus as well as the extension staff by recognizing each other as a part of the extension system through regular contracts in the process of sharing information and knowledge.

Adarsha Rythus assist extension staff in implementation of schemes like Polam Badi, Seed Village Programme, Organic farming, Rashtriya Krishi Vikasa Yojana, National Food Security Mission etc. Adarsha Rythus are involved in day to day actions with regard to schemes and technology subsidized input availability & procedures to avail the same, the broad regulatory mechanism for inputs and steps to be taken in case of failure of a particular input. Adarsha Rythus are actively involved in mobilizing farmers in special campaigns like Rythu Chaitanya Yatra, Rythu Sadassu Prajapatham and Saguku Samayattam. They are actively involved in identifying tenant farmers and in forming Joint Liability Groups to provide credit facilities. The Mandal Agricultural Officer organizes a meeting with Adarsha Rythus and other line departmental officers on 3rd Monday of every month in the Mandal head quarters to discuss various problems arising at field level. The Padipantalu magazine and honorarium are being disbursed to Adarsha Rythus on the same day.

The Agricultural Officer and Line Departmental Officers visit the fields, demonstration sites etc. along with Adarsha Rythus in at least 2-3 villages on the 1st Saturday of every month.

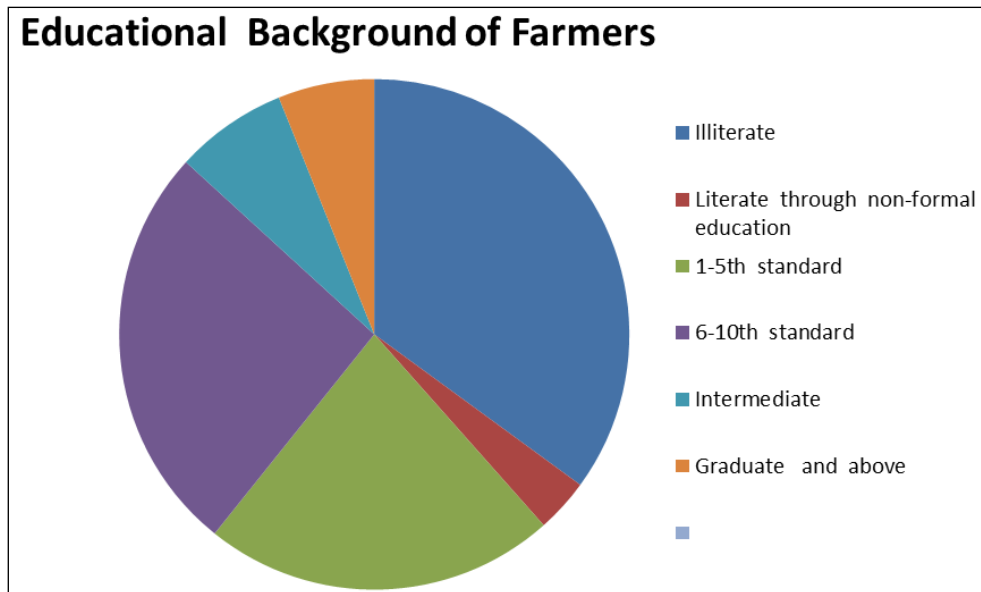
Adarsha Rythus maintain a list of 200-250 farmers' holdings allotted to him/her in the registers with information on the type of soils, extent of crops grown, number of Sheep, Cows, Fish ponds, particulars of the credit availability etc. on each farm holding. An honorarium of Rs.1000/- per month is provided to each Adarsha Rythu.

In this paper, the Author is analysing the performance of the Adarsha Rythu Scheme based on the survey conducted by the Centre for Good Governance in 2014. This survey covered all the Adarsha Rythu from all districts of the state.

**Analysis of Survey on Adarsha Rythus**

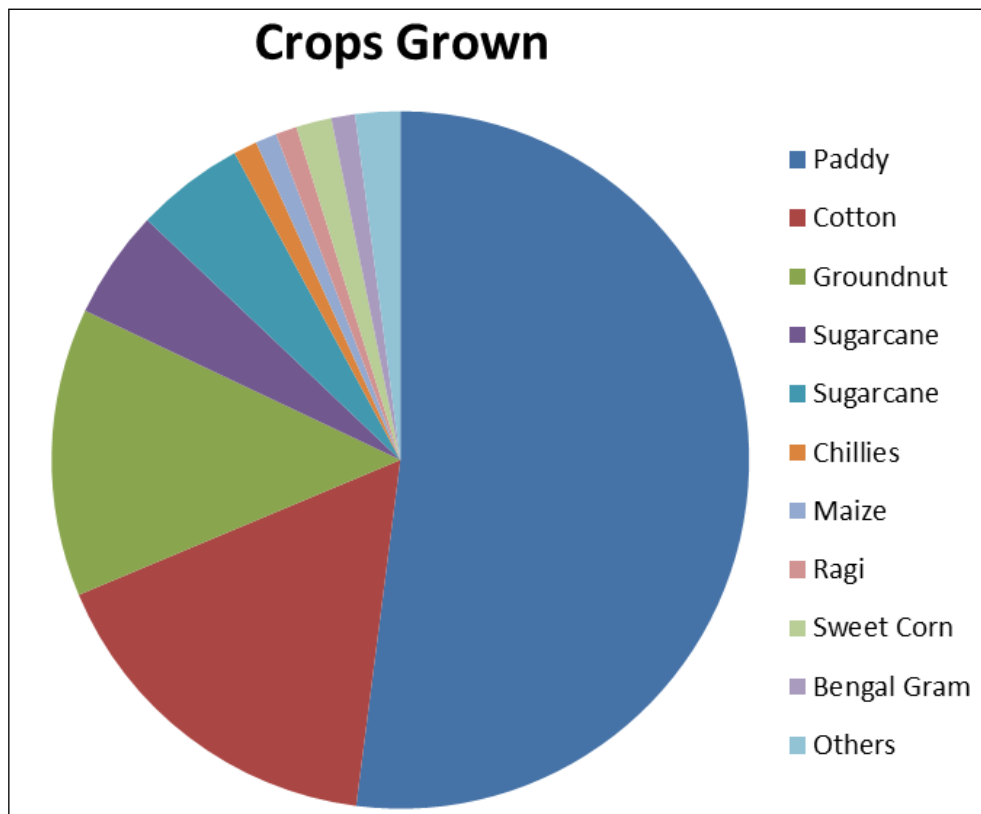
**Background of Adarsha Rythus**

In the scheme of Adarsha Rythu, It is found that Literacy levels are very low. Therefore, more adult-friendly education should be implemented keeping in mind that, adults are relevancy-oriented, and they seek a reason to acquire learning. (Knowles et.al., 2005) <sup>[14]</sup>.



**Fig 1**

We find that most of the farmers are engaged in Paddy cultivation. Hence, they need large emphasis on low water consuming varieties, better cultivation techniques etc for profitable cultivation. It is also found that more than 60% of the farmers are cultivating second crop, mostly Horticulture crops, which require advanced and effective new technologies in farming requiring continuous technical and professional expertise or full time Adarsha farmers on Horticulture.



**Fig 2**

Tractors are basic machines in farm cultivation; Government should work on identifying progressive farmers with the help of Adarsha Rythu. Also, they can provide machines for cultivation by increasing the frequency of Custom hiring centre (as they are getting 50% subsidy).

Adarsha Rythu should encourage farmers to have Soil Health Result card for better and optimal use of fertilizers so as to achieve cost efficiency.

Role of Kisan credit Card should be given emphasis by Adarsha Rythus in his/her group, since it can promote better and cheap credit facilities. Hence, KCC can be used as a channelized for providing cheap credit to farmers

### Awareness of Adarsha Rythus in Rural AP

Adarsha Rythu Program is successful in terms of outreach to farmers; Farmers have a good opinion on this Program and it is found to be effective across the entire state except in Guntur Dist (Since farmers in Guntur are not meeting Adarsha Rythu). This programme is found to be more effective in Telangana than in Andhra Districts. Most of the Adarsha Farmers are conducting meeting for their group, the attending percentage is observed to be quite impressive and satisfactory except in Ananthapur, Chittor and Guntur.

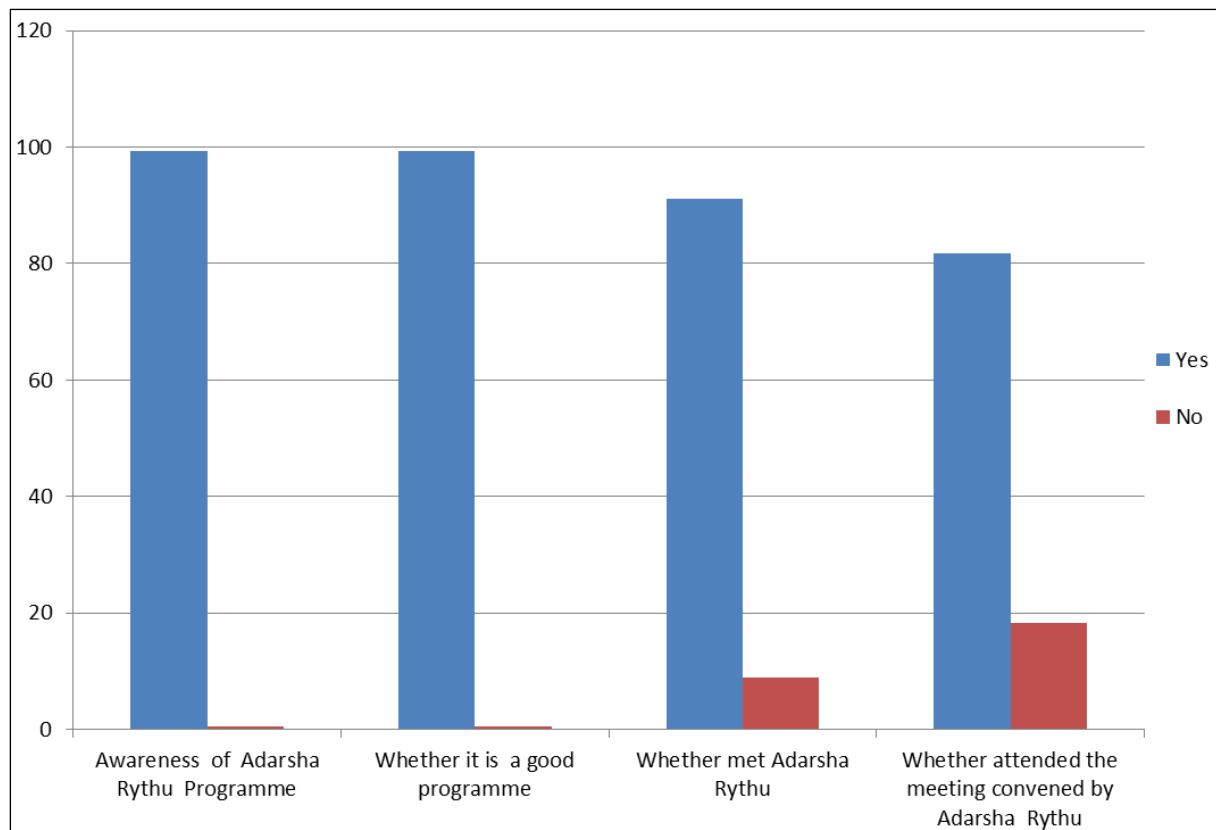


Fig 3

As about 66% of farmers are attending Gram Sabhas which can serve as an effective platform for discussions between farmers. However, Adarsha Rythu program is large ignored by Gram Sabhas, the potential of this medium is largely untapped. It is also observed that Pamphlets containing agricultural information is not reaching farmers. Moreover, most of the farmers find it difficult to understand agricultural pamphlets due to persisting high illiteracy levels of farmers and technicalities involve in Pamphlets.

Almost half of the farmers are having membership in club/society/ community Organization. And these platforms can be increasingly used for discussion and dispersion of information on farming techniques.

Technical, administrative and banking infrastructure is essential for the successful implementation of such programmes. However, In this case, it is found that Adarsha Rythu could not facilitate interaction with Scientists from Agricultural University, which would have helped Adarsha Rythu in understanding technological transfers and new effective methods of cultivation. He also could not facilitate interaction with bank officials so as to understand more about the credit linkage to the farmer. He also could not acquire knowledge about HYV seeds, usage of fertilizers and latest equipments in agriculture as he could not facilitate interaction with private seed, fertilizer, equipment companies.

However, Adarsha Rythu could facilitate interaction with Government officials and gather information new policies and scheme implemented by Government. Again, It is found that It is more satisfactory in Telangana than Andhra districts.

It is also seen that Adarsha Rythu are themselves not adopting new farming technologies themselves, As there is no adaptation by them, farmers are not getting chance to study the field operations and benefit of new

technology. Therefore, As Progressive farmers were the most important source (16.7%) of information for small farmers (Eicher, 2007), Government should provide financial assistance to adopt new technologies to ARs (who are Progressive farmers) so that small farmers will be encouraged to adopt it.

A good indicator which comes during the survey is that Adarsha Rythus are able to bridge the gap between the department of agriculture and farmers. However, still there is a scope for improvement. Farmers are found to be satisfied with the services provided Adarsha Rythu and their selection process in the entire state except in Guntur dist. Moreover, Large number of respondents recommended that other farmers should follow services/advice of Adarsha Rythu.

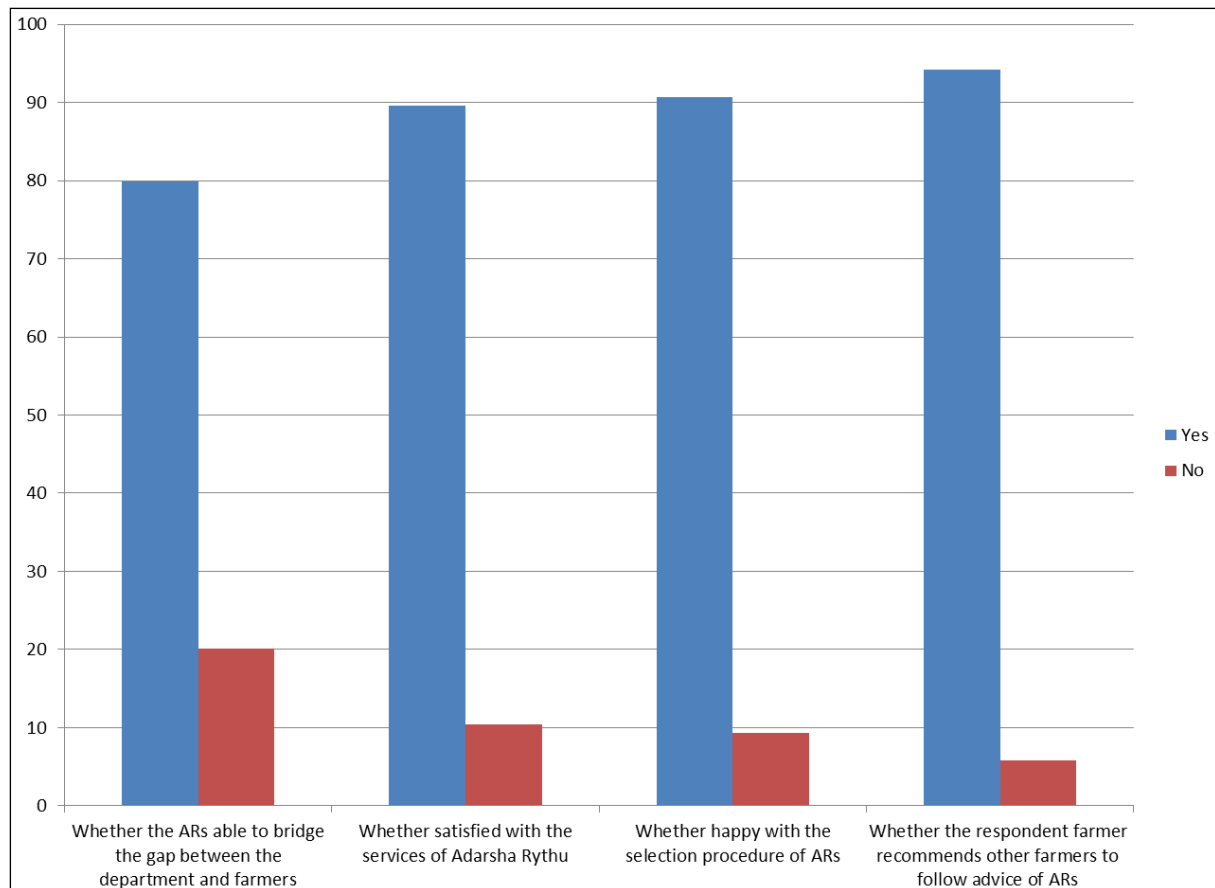


Fig 4

### Improved Awareness through Adarsha Rythus

There is no rational improvement in awareness through Adarsha Rythu about Government subsidy scheme for farmers- soil testing. However, there is considerable awareness created on Government subsidized seeds in most of districts. It should also be noted that, the condition requires improvement in districts like Mahaboobnagar and Guntur.

Farmers are completely unaware of the Seed village programme. Special emphasis should be laid on it as it provides low cost seeds to the farmers.

Farm mechanization is not been practiced in the districts, as high investments and huge capital outlays are required at the initial stages. Therefore, government should encourage more Custom hiring centres to provide enough machines for farms.

Vermi compost units are not a common practice in the districts of the both the states. The farmers should be encouraged to use it as it is organic fertilizer, and its increased usage can enhance the productivity of soil as well as reduce the cost of production.

One of the fundamental tasks of Adarsh rythus is to make the farmer aware of the innovations and technology discovered in the agricultural sector. However, it is found that Adarsha Rythus fail on multiple grounds.

New crop varieties of Paddy, Groundnut, Cotton, Maize, Red Gram, Castor, Sugarcane, Green Gram, Sun Flower, Jower, Chillies, Soya Beans, Black Gram, Seasum, Bajra, Bengal Gram, Ragi, and Safflower are not implemented in most of the districts. New seed varieties are also not implemented in all the districts.

There is no awareness on improvements in farming practices, advanced irrigation facilities, new techniques of Ridge and Furrow in ploughing, Micro Irrigation, adoption of Bio-control measures, Mechanization methods in their fields.

Even though some Adarsha Rythus are creating awareness on pest management – Chemical pesticides. It is less than 4%, and there is still long way to go on pest management & Chemical pesticides. Except a few Adarsha

Rythus, There is no awareness created on use of Fertilizers, Organic manures and Green manures for Soil Health Management.

There is no awareness created by Adarsha Rythus on the cost effective combined use of Bio control, Mechanical methods and chemical pesticides. Even though some farmers in East Godavari are aware of combine use of organic and green Manures and fertilizers. But the scenario is not the same in other districts. Also, awareness is not created on combine used of Organic Manure and green manure by Adarsha Rythus.

There is no awareness created by ARs on the upcoming methods of Horticulture, Floriculture, and Organic Farming which can be utilised as source of income. Also, Hardly any awareness is being spread on farm machinery, Water harvesting techniques, new Marketing strategies to market their crops and techniques to increase milk production and milk quality by ARs in the districts.

Awareness is not created on use of Dip irrigation expects a few districts in Ananthapur and Warangal. Adarsha Rythus didn't create any awareness on Crop insurance, Crop Loans and Pavaala Vaddis which are essential for sustainability of agriculture and should be provided to save farmers from losses.

### Adoption of New Ideas from Adarsha Rythus

Apart from failure of Adarsha Rythus in creating awareness, they have also failed in the adoption of methods promoted by them. It is seen that there is no adoption of new ideas from Adarsha Rythu on Government subsidized Paddy Seeds. Negligible awareness is being created by Adarsha Rythus on Sugar Cane subsidized Seeds majorly in East Godavari district. Awareness about Government Subsidy on Pump sets is seen in a few districts of East Godavari and Nizambad. Negligible awareness created is observed on Ragi subsidy Seeds majorly concentrated in Visakhapatnam dist. Again, negligible awareness is seen on Cotton subsidy Seeds concentrated in East Godavari dist and Warangal Dist and Red Gram subsidy Seeds concentrated in Ananthapur dist and Warangal Dist.

No awareness is seen on Government subsidized Bengal Gram Seeds, Government Subsidy for Vermi Compost, adaptation of new crop and new variety seeds and new farming practices and seed treatment across the state. Moreover, There is no adaptation of SRI farming practice of Paddy, direct drum practice, Seed irrigation practice, and advanced pest management practices in the state.

There is no adoption of improved marketing techniques to market their crops, Water Harvesting practices, improved practices for increasing milk production, new horticulture crops, new floriculture crops, new organic farming practice and drip or sprinkler irrigation.

However, Some considerable awareness is observed to be created by ARs on Groundnut subsidized Seeds in Ananthapur and Chittor and Maize subsidized Seeds in Nizambad and Warangal. But overall condition needs to be improved across the states and steps should be taken in this direction. Even though a few farmers implemented the use of better quality seeds and Zinc sulphate in their crops by soil testing but the overall scenario is in bad state. It needs to be improved a lot.

### Targeting of Government Schemes

There is a considerable number of adaptations in soil testing happening in Visakhapatnam, Nizamabad and East Godavari Districts but the situation of adaption in soil testing in the remaining districts are still under below average. Though, considerable numbers of soil tests are facilitated by Adarsha Rythu but still there is scope for improvement. Also, Even though the Soil test is done but the results of the test are largely unknown to the farmers.

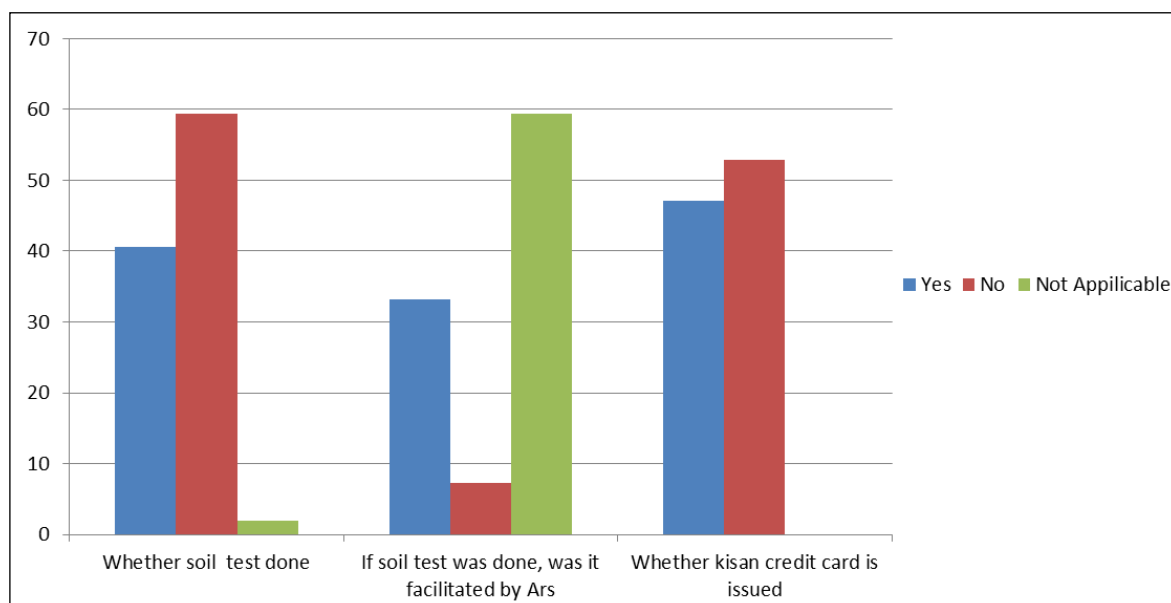


Fig 5

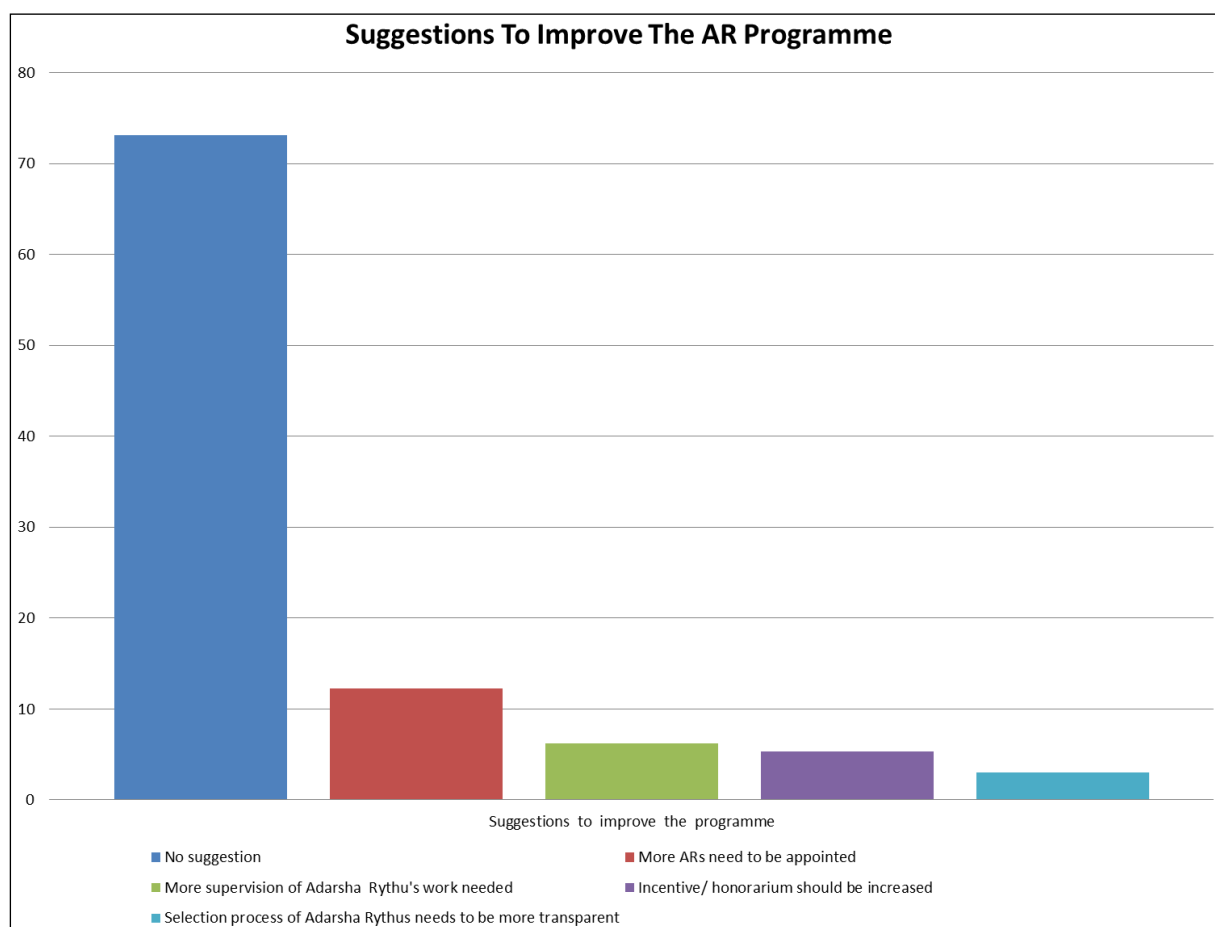
Large numbers of Farmers are possessing Kisan Credit Card but still half of the farmers do not have access. And most of the KCC are given by Scheduled Commercial Banks rather than co-operative banks. Average mean of credit given by KCC is 32,200 Rupees. It is seen that most of the farmers are using their KCC for purchases of Inputs, and only negligible sizes of farmers are not using it.

No farmer is enrolled as non-loaned farmer by Adarsha Rythu, and No Adarsha Rythu (on farmer's behalf) or no farmer approached any bank for loan.

Large number of farmers have already received the benefit of subsidy from the Government in Agriculture through the intermediation of Adarsha Rythu. However, still 40% of the farmers are not receiving any benefit.

Farmers have not received the benefit of subsidy from the Government in areas of horticulture and animal husbandry through the intermediation of Adarsha Rythu. No other subsidies were received from Government through the intermediation of Adarsha Rythu by farmers expect a few new seed subsidies and Thaipan Spray pumps.

When enquired about the improvement of system of Adarsh Rythus, more than 73% farmers did not have any suggestions for the ARs. 12% farmers asked for appointment of more Adarsha Rythus. 6% Farmers said more supervision is needed on Adarsha Rythu's work. 5% farmers say that Incentive/ honorarium given to Adarsha Rythus should increase so as to provide them incentive for better work.



**Fig 6**

### Conclusion

The department of Agriculture have a strong departmental capacity with technically qualified staff from District level to Mandal level. But at the grass root level, they only have AEOs, who are sparsely distributed. So, traditionally department hired contractual extension workers in grassroots like Multipurpose Extension officer and Adarsha Rythu. The major problems of these workers are lack of capabilities in disseminating technological and farming techniques and lack of accountability towards farmers.

Public extension system needs huge funding from exchequer for operational purposes. In this scenario, extension systems can't be sustainable in long run because of various ideologies of different political administrators. Therefore, there is a need for self-sustainable model of extension with private partnership to save exchequer losses.

Majority of Farmers are marginal and small farmers who have low levels of educations. So, while disseminating information regarding technology and advanced farming capabilities, extension system should adopt adult friendly methods for the penetration of ideas into the farmers because adults are relevancy-oriented and they



seek a reason to acquire learning (Knowles, *et al.*, 2005) <sup>[14]</sup>. Financial conditions and market access of the farmers should also be given preference while designing extension model.

Performance of the extension workers should be directed with targets, timelines, and feedbacks. With these elements, effectiveness and efficiency of the extension work will improve. To carry forward the extension work, farmers should be encouraged in building capabilities and adopting innovations, and changing practices in production. Impact of this extension system can be measured by measuring the extent of spread of innovations, productivity, distributional effects, empowerment and gender-specific impact.

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