

Chapter 10

Recommendations and way forward

10.1 Conclusion

There is no doubt that mKisan and Kisan Call Centre has opened up new vistas of agricultural extension by effectively using telecommunication network for reaching out to the farmers. As the number of extension workers were limited, the reach of extension workers was not sufficient to cater to the needs of the farmers. The introduction of ICT technology has helped to alleviate the issue to some extent. Private extension initiatives has also ventured into the use of ICT much more innovatively creating results in limited areas of their operation.

While the project has been successful in delivering huge number of SMSs in mKisan project and increase in the number of calls received in Kisan Call Center, the study has revealed certain areas where improvement can be made. Other successful projects in this sector has shown that introduction of certain features can certainly increase the benefits delivered by mKisan and KCC projects.

10.2 Current Initiatives

To understand the further initiatives in the agricultural extension system, discussion with officials of Department of Agriculture and Cooperation was carried out. To make the usage of mKisan more effective, an SMS policy was prescribed during 2015-16. This effectively limited the officers who can register from each level and each sector. The SMS policy has also included measures which can yield more localised messages. The SMS policy is at appendix 9. To leverage ICT other projects like eNAM (

which creates a National agriculture virtual market by linking mandis) has been initiated which can complement the extension activities. Similarly during 2016, Kisan Suvidha APP has been launched which provides all the agricultural information through an mobile APP. These can take advantage of the growing numbers of tech-savvy farmers. (During the survey one of the farmer has indicated that he is not using Kisan call Centre and mKisan SMSs as he is currently using android apps for the same indicating that some farmers are able to take advantage of the new technologies effectively).

10.3 Recommendations

10.3.1 More efforts in awareness creation is required

The awareness of e Governance initiatives was very poor among citizens in the villages visited during rural study visit suggesting more targeted efforts in the awareness creation. Most of the farmers were unaware of the mKisan and Kisan call centre initiatives. Such gaps in awareness may create a digital divide among the farmers. For creating awareness in addition to the established means of mass communications, targeted awareness creation through mobile phone or other methods needs to be thought of. The states where farmer registration are very low need to take up the matter in an urgent basis so that registration of farmers improves. Some agriculture important state like Karnataka has a very low registration.

10.3.2 Capacity building of Farmers in handling ICT initiatives.

Discussions with farmers during the rural village visit revealed that at least some of them are not comfortable with reading the SMS. The issue is not related to literacy alone as some of the farmers are not comfortable with using the mobile phones and their use is limited to the voice communications. Efforts to leverage the rural workers of government as well as NGOs for the capacity building of citizens in this regard is critical in utilizing the full potential of mGovernance techniques. The Services of Asha workers and agricultural extension workers who regularly visit the villages can effectively be used for such capacity building initiatives. In addition in field

trainings conducted for farmers like farmer field schools, the training on the use of e tools can also be included.

10.3.3 Use of Out Bound Dialling

Many international cases in developing countries had used the out bound dialling in an effective way to reach out to the farming community. The conveying messages through dialogues is a possible way of communication when using outbound dialling. Many villagers will be more comfortable with receiving a call rather than reading an SMS. As done in some projects, characters can be created in the dialogues so that it can relate to the village life and the challenges faced by them in farming. While the possibility of outbound calling is indicated as a future plan in the mKisan portal, this seems to be not taken off till today. Currently the calling rates has fallen to a great extent making the outbound call more economical. In this changed scenario, the department should once again explore the possibility of the use out bound dialling along with SMS portal.

10.3.4 More participation from sectors like horticulture/animal husbandry

As can be seen from the analysis in chapter 9, 88% of the messages belong to Agriculture sector while important sectors like horticulture and animal husbandry are contributing only 5 to 6 % of messages. Livestock alone is contributing to around 25 % of the agriculture & allied sector's contribution to India's GDP (National Accounts Statistics-2016; Central Statistical Organisation; GoI) The share of horticulture also is more than 30%. The sectors contributing to more than 50% in agriculture's GDP is coming upto only to 11 % of the messages, indicating a skewness favouring agriculture sector. This is more alarming when considering the fact that Indian farmers are mostly small & marginal and multi sector approach is suitable for them to create more profits from the limited resources available to them. This point has been stressed by the Department of Agriculture, GoI in various letters/emails to state governments but still the share of allied sectors are very small. A better balance need to be achieved between the sectors in creation and sending of messages.

10.3.5 Comprehensive intervention

The issues in agriculture sector is not that of information alone. Getting information alone will not empower the farmers in taking action which will benefit them. For example, the information of higher market prices in a neighbouring market may not by itself ensure that the sale of the products in that market. Many a times the relationship between these stakeholders are more complex. In addition to the information efforts need to be made in addressing some of these issues so that farmer can utilise the information to make better profit for himself. The initiatives like electronic national agriculture market (eNAM) and Modified crop insurance scheme all are in this direction. Thus a more favourable network will be available to the farmer so that he is free to take decisions and able to implement these decisions with out any difficulty.

10.3.6 Convergence of other Sectors like health/education

As indicated in the previous chapters studies in other countries has suggested that the farmers may like to receive other informations related to other sectors like health and education along with agriculture related information. As the created data base of farmers is huge, and as the survey indicates , they are eager to receive the SMS from mKisan handle, other sectors can leverage on these to spread important messages to rural population. These will benefit all the stakeholders. Farmers will receive additional information which will make their life better also other sectors will be benefitted by the interested audience for its messages. These messages may be more useful compared to the broadcasting of certain messages to the entire mobile numbers.

10.3.7 Frequency of SMS

Almost 73 % of the famers surveyed said that the frequency of the SMS is very less and the frequency has come down in recent times. While it is important to avoid unnecessary messages, a frequency which keeps the farmers interest alive need to be maintained. As per the revised SMS policy circulated by Department of Agriculture, Gol, the total SMS per month for all the states together is around 32.71 crores. Considering 4 SMSs in a message (as indicated in the revised policy), total of 8 Crore

messages is allowed which lead to an yearly message limit of 96 crore messages. Against these during 2017 only 62 crores messages were sent by states achieving only 65% of the target. The state wise variation in this regard is also important factor and needs correction in some states where the message rate is extremely low.

10.3.8 More involvement of District officers

The analysis of district level messages indicates that in some states the district level officers from the state government is not active at all. It is to be kept in mind that agriculture practices are depended on the agro climatic zones and therefore a common message to entire state or entire country may not be useful to the farmers. So, the involvement of district officers is a must. (It is also evident from the survey that Uttar Pradesh farmers commented more positively about the service than Madhya Pradesh farmers. The district level involvement of officers in UP is much higher than the MP officers). ICAR and IMD are doing an excellent job in this direction as most of their messages emanates from KVKs and AMFUs which can provide messages based on the agro climatic zones. As it can be seen from chapter 9, only 10 states among the major 21 states have send more decentralised messages, if effort of state officials are only considered. Even if the KVKs are considered as a part of state messages, there are six states which still have more than 50% messages concentrated at state headquarters. In the revised SMS policy, even though efforts are made by limiting state level and Central level messages by specifying maximum number of messages which can be sent by state level and central level offices, this seems to be not sufficient to improve the situation in some of the states. These trend of concentration of messages in state headquarter need to be reversed may by specifying state level to district level ratio in the SMS policy.

10.3.9 Aggregation of farmers

During the discussion with farmers/citizens during the rural visit, many rural citizens have indicated that they are still not comfortable with reading SMSs. While other methods like Out Bound Dialling (OBD) can be employed to circumvent this issue, the collective strength of farmers can also be explored. In rural areas, still the information received by one farmer is broadcasted verbally to other farmers in their

friendly circle. Such circles can be formalised to effectively share the information received through the SMSs. Such groups have a positive impact on the bargaining power of the farmers. Some private and international projects utilise this concept to effectively influence the entire value chain. The concept of Farmer friend is already implemented in India's Agricultural Extension System. Every village is having a progressive farmer designed as farmer friend who act as a intermediary to spread the new technologies to the fellow farmer. One possibility to be explored is effectively utilizing them to spread the information received through SMSs to others.

10.3.10 Relevance of Messages

To effectiveness of such information services depends on the content of the messages and its relevance. The analysis of the content of the messages indicates that use of the platform for sending greetings (15% of the messages of one officer) is still going on. Similarly there are instances of same advisories sent on multiple times within a short period of time. Among schemes also the information on same scheme was sent multiple times. The revised SMS policy clearly indicates that these needs to be avoided. More vigilance and awareness are required among officers so that their quota of messages are not wasted by just greetings or repeated messages but to use the platform more wisely. At least sample monitoring needs to be carried out in every level to monitor the messages for its content. Every SMS is costing the government and messages without proper content is a wastage of public money. The efforts of Government of India to show the effective cost involved in the advisory sending is a good step to generate awareness. But continued efforts to improve the content of the messages needs to be carried out in every level.

10.3.11 Regular Market information.

During the farmers survey, less than 12 % of responses indicated that they are remembering the receipt of market information on the mobile. In addition some of the farmers also told that even after registering to get market information from particular *mandi* they never received the SMS. On analysing the AGMARKNET website which consolidated the market information from the markets, it is found that only around 2000 markets are supplying information out of the 3901 markets which were

expected to supply information. It can be assumed that the absence of availability of *mandi* rates to farmers may be due the unavailability of the market rates in the portal. The data collection needs to be improved so that farmers who would like to get the market information should get the same daily. These needs daily updation of the data at least from all the 3901 *mandis* connected to Agmarknet. Similarly all the commodities traded on that day needs to be reported on a daily basis. The market information is critical to farmers and it is one information, the farmer will look forward to get in his mobile daily.

10.3.12 Improvement of Kisan call Centre Access and Quality of advice given

Many farmers of Madhya Pradesh had opined about non accessibility of Kisan Call Centre and also the non helpful answers from the Call Centres. A state wise detailed analysis to find out the weak states need to be carried out for getting a better country wide picture of the same. Advices needs to be implementable in the rural areas where farmers operates. The Agents need to be continuously updated about the current realities in the field so that they can understand the issues raised by the farmers correctly. The issue of access to each KCC also needs to be analysed so that access issues can be solved in a time bound manner.

10.3.13 Changes in SMS Policy

The Department of Agriculture, Gol has come out with a SMS policy (at appendix 9) to guide the stakeholders in the use of the portal. The policy intends to limit the misuse of the portal by placing certain maximum number of messages to each level. Even though there is a limit placed on State level messaging, the same seems to be not sufficient to improve the district level messages in some states. It is felt that state level messages may be limited further and upper limit for the ratio of State level SMS to total SMSs need to be prescribed so that more involvement of district officers can be ensured. Another important factor is the proportion of SMS allocated to each states. The same as per the policy has framed taking into consideration the past uses which indirectly encourages only those states which are already using the portal effectively. The same may be further modified taking farmer population in the state

also into consideration so that less participating states also feel the pressure to improve the performance.

10.3.14 Data cleaning

During the survey it came to light that many mobile numbers which are in the database is not existing anymore. Cleaning the database is an important activity to be carried out regularly. Such ghost numbers may even increase the cost as SMSs will also be sent to such numbers. Ways to carry out the regular data cleaning using any technical methods like use of SMS delivery confirmation may be explored.

10.4 Way Forward

The present study has been conducted within a very limited timeframe with very small sample of farmers in two states and for a much better picture, a wider survey is required. The survey also has not gone into the financial benefits accrued to the farmers in using these services. A detailed study inclusive of financial aspect will give total analysis of the projects and then only we will be able to measure the success of the projects. Similarly in cases where advices are not acted upon by the farmers , a study on what prevents farmers from acting and whether any systemic changes are required in the whole network need to be found out.

The mKisan and Kisan Call Center has showcased the effective use of telecommunication network in Agricultural extension and it had successfully passed through the initial phases to mature into an effective support to the conventional extension activity. The farmers who started using these services has been looking forward to the advices through these services and expect that the service will further improve in delivering relevant information. As Kisan Call Centre is completing fifteen years and mKisan, five years, aligning these services for farmers betterment has to be the priority of the department of agriculture.