

Business Idea Generation and Entrepreneurship Case Studies

W2L4 - ICTs and Agribusiness

Instructor – Dr. Saikat Maji, BHU

Hello friends. In today's discussion we are going to talk about information communication technology and its effect on entrepreneurship development, particularly on Agri business. As you all know, ICT is an driver of entrepreneurship development among the population of the country. It can also facilitate the business process by bringing efficiency in information sharing and services. ICT itself also well, entrepreneurship opportunity for the people involved in the business sector. So if you look into this particular picture provided by startup India 2020, so IT services itself that the most of the if you try to look into the entrepreneurship opportunity through startup, OK 12.9% startup are on the IT service itself. So though the other startup from the other sector, like agricultural financing and renewable energy so they are the other part of the this startup, but they are also involved they also use ICT for for running of the startup or for efficient functioning of their startup. So that is the involvement of the ICT, So what is ICT, so ICT information, communication technology is an umbrella term that includes any communication device encompassing radio, television, cellphone, computer and network hardware, satellite system and so on as well as the various services and appliances with them, such as video conferencing, distance learning, etc. So mainly it is ICT comprised of three important element that is computer technology, communication technology and information management technology. So, if you look into that in more extensive work, it involve hardware software. It involves human resources, it involved database and cloud computing at also it involved Telegram video conferencing system.

So now if you want to take a look into the what can be the role of the ICT in the Agri business. So I divided them into 3 broader role. The first one is the ICT for the production system management. So which include the improving the short term productivity so ICT can be used for providing information such as weather update which is need to be provided in a timely manner and low cost. So what one of the example of this is the e-Diary project in Sri Lanka, in which the milk yields were improved by informing the dairy farmers about most opportunity time for artificial insemination. Second one is crisis management. Crisis management basically help to prevent losses rather than rising productivity. So often these services as an alert system, enabling farmer to react quickly before an upcoming event often, weather or disease based example is that like RANET project in Kenya which uses which uses phone line SMS technology to collect all that data from the local farmers and pushed out warning to them on potential weather related disease. So in India one of the example is the mKRISHI initiative by the Tata Group.

So under the production system management, there are also ICT can target or ICT can supplement the long term productivity ensure the long term productivity. So under the long term, productivity to cover the topics that take longer to learn and are often offered with other technologies and channels such as face to face training or extension agent support. So we have it act as an supplementary support to these activities. So it can also be used for the risk management, so it improves the risk management ability. So risk management is long term in scope, but if you compare it with the crisis management, so they help the farmer similar to the crisis management, they help the farmer to avoid losses rather than increasing the product. So these risk management activities are take longer time to absorb the implementation and benefits are realized in the much later stage example is the ICRISAT in India, they create its virtual Academy to train the local women through Internet based video conferences so that they could act as an extension agent and help the women farmers change their cultivation and harvesting technique to reduce the long term risk.

Now coming to the next border role that is the ICT can be for market access from the market access action. ICT can be used for pricing, provide price information so it is the most common ICT intervention for agricultural value chain Okay so, in which commodity price information is pushed out to the customer on a regular basis. So advantage of such service are like price transparency and improved negotiating leverage for the disempowered seller because most of the farmers are the smaller marginal, they don't have the enough product in their hand or enough leveraging power to affect the market price example is AGMARKNET portal in India which provide information about prices and also many other aspects to the farmer to help them to realize better value for their product. So ICT for market access, it may be like virtual trading floors. So virtual trading floors or VTF are electronic marketplaces, where buyers and sellers connect through the electronic data. So under VTF or Virtual trading floors so buyers and sellers and not to have physically present in the same location to make the exchange. So one of the example is the e-NAM which along with the provide along with the pricing information which are there in the magnet. It also provide the functional services to the or must to actually sell their product online but physical operation is carried out in the Maldives. Now it's the ICT can be also help to provide the holistic trading services to the farmers. So this holistic trading services provide the same service as pricing information service and VTF. So with additional assistance beyond the simple transaction of purchasing and buying agricultural products. So not only linked the suppliers and buyers, but also connect the parties for other marketing function like logistics support, transportation, processing, storage, even the education of the farmer. So often this holistic trading partner also provide the integrated financial services like payment credit etcetera along with the this traditional marketing

services like buying and selling. So this is the one, one of the way that how this ICT is improving the agri business so example is the e-chaupal under the ITC in India.

So now the third broader area where the ICT can make effective or can make meaningful contribution or making the meaningful contribution in agri business, that is the through financial inclusion. So in the transfer and payment section, so money transfer through ICT solution, notably through mobile phone have become a much discussed solution. And one of the most well known success story of this use of the ICT for the transfer and payment is the success of UPI in India which enable the farmer to get their payment instantly from the mandi through their mobile phone, even under the UPI. Even then, under the new initiative under UPI, the particular person need not to have the Internet for also transfer of the money. Okay so the secondly under the financial inclusion ICT integration in the credit sector, so it integration in the credit resulted in the transfer of the credit in the with higher efficiency. Also it has improved the credit risk monitoring and the better delivery to the farmers and institutes of the customer. Another one of the most often overlooked area was the how to enable the farmer to save their money in a secure way. So in the saving fund also the ICT, because the rural poor need financial service that is convenient, flexible and secure for saving their little money they have in. Their hand. So in this field also ICT bring a huge change to enable the online this saving of their money into the different branches OK, by integrating the ICT enabled services.

So also the ICT has make huge contribution into the improving the insurance sector or agricultural insurance sector. And it has enabled the adoption and administration of the insurance or make much more easier adoption and efficient administration of the insurance. How? So because in insurance policy renewal are historically very low specially in case of agriculture. So what are the solution which the ICM offered? OK that is the the short message service reminder also the reminder through the notification through using the Internet or also in the smartphone are also nowadays, very popular and successful. Also, there was a trust issue between the customer and insurance company because the trust was generally low. OK, so because of the late processing of the claim, so now ICT integration has ensured that improved claim processing in types of less time requirement for the processing of this claim, as well as claiming itself. And the third part or the third problem is the insurance sector or agriculture insurance sector was the level of the data for appropriate pricing of the policies and monitoring of the potential risk event was inadequate. So how the ICT helped this process? So ITC, this ITC integration or ICT integration has put in place the remote rainfall sensor connected with the database via or different sensor or other sensor remote with the database with the satellite connection. Thus, better monitoring of the potential risk and also informing the farmers the upcoming risk. OK. So these are the three border section where the border area where the integration

of the ICT made a huge impact on the agri business and continuing to doing so. So in conclusion, so ICT has become a vital component for efficient business operation and marketing. OK, so in general from marketing perspective, ICT has increased the price share of the farm producer through its ability to deliver the information in a timely manner. From the production perspective, ICT has allowed farm producer more flexibility in terms of what and how to produce and how much input to be used or what should be the efficient level of input for the efficient production or optimum production and from the service perspective, the ICT provides a new way that how people or new way for people to interact with each other and thus opening up huge opportunity for the firm and opinions. So these are the in conclusion the in short the contribution of ICT in improving the Agri business, so with this, we will conclude today's lecture.

Thank you.