## Innovation, Business Models and Enterpreneurship Dr. Vinay Sharma Department of Management Studies Indian Institute of Technology, Roorkee

## Lecture - 27 Innovation Sustainable Conditions

Hello once again after having a discussion on social entrepreneurship, innovation association of entrepreneurship with innovation and, specially with sustainability. And elaborating upon the context of societal development with reference to sustainability or let us say with reference to entrepreneurship to propel sustainability, or established sustainability.

It is our duty and a logical progression to understand, that what are those conditions which promote innovation in a sustainable manner to propel sustainability and entrepreneurship at large, how to look upon the whole of this scenario.

And definitely there are so, many actors which can be listed for this purpose which we will do also, but here is a context which is extremely relevant to be dwelled upon beforehand and, the context is to be summarized in one key word that is called that that can be concerned, concern of everyone with reference to societal development and sustainability through entrepreneurship. With a logical support of innovation, innovation we have referred to insights also which proper innovation, we have referred to design thinking also which actually carries forward the innovation.

So, there is a whole lot of thinking process which is associated with this, but then concerned is the key word are we into it are do we shared this concerned. If someone is referring to Ganges or a project is going on do we have an enough support, which is garnered towards this kind of an effort are we all into it sometimes I find we are not, because when I visit these places as I referred to in our last discussion besides Ganges.

And, I look at the people who come for the purpose of entertaining themselves or, getting away from their daily routine lives for weekends, or let us say for particular occasions. When I look at their gestures, when I look at that their approach I doubt that we shared, this concern towards saving Ganges and reducing pollution and so on.

It is a general tendency what we have developed in due course of time is that until a unless it comes, as a devastating disaster to us, or we become sufferers individually to that kind of a thing we do not tend to refer to such kind of things with a larger context.

Just a brief digression although it is connected to sustainability entrepreneurship and innovation as such, it is very important reduction in terms of accidents, or let us say precautions which can be associated with you know road transport and accidents. We have been sharing this concerned with each other for a longer time, but I have realized that people who unfortunately I have suffered because of this, or in due course of time.

They are slightly more concerned or let us say more concerned, because they have gone through a particular loss or they have gone through a particular blow in their lives, many people who actually can sensitively feel they are also related to this concern, but most of the times we realize that people are not into it.

People are not following the norms which can reduce accidents, or let us say people are not following a behaviour, which should be mandatory for every one of us to be followed to reduce the level of menace which accidents have caused, and to reduce the number of deaths caused by this these accidents to reduce the devastation which accidents bring in.

So, coming back to the subject, when you know I go along the river stretch I feel that people they create so, much of waste and, they go back and they do not look back I realized that, we are we are not actually sharing the concern which we should. So, who are those people who are the elements, what are the what should be the characteristic of those elements which should be associated with you know the subject of innovation sustainable conditions, or the conditions which could sustain innovation, as well as sustainability at large which should be the resultant of what we have realized in due course of time.

So, one is government definitely so, their role is to draw policies which can bring in innovation at the foreground and, definitely in coherence with the sustainability and entrepreneurship. For example, government can definitely announce on the projects, or you know kind of advantages to be given to the entrepreneurs, or people, or innovators who are thinking in terms of sustainability, or measures of sustainability or elements of sustainability, or who are thinking towards the larger societal benefits.

Government should also support those efforts, with reference to their brand development bringing them to the forum of discussions, you see what happens is integrated marketing communication has brought tools to us, which create brand awareness.

And definitely is associated with what kind of money is to be supported, or what kind of you know kind of integrated marketing communication channels are effectively used and, how campaigns are designed and devised, but it is definitely kind of apparently visible also and, theoretically proven also academically also proven. That the efforts which are with which have more commercial viability, or let us say are supported with lots of persistent efforts in terms of putting in money and channelizing integrated marketing communication.

Those have eligibility for larger brand awareness in terms of organizations, or products. And on the other side efforts, which are more relevant for the societal development, or let us say directly associated with the societal development, which we tend to call social communication, or you know cause related communication. Those efforts because they do not have a direct resultant in terms of gaining immediate profits out of that communication, those are not so, consistent and definitely, they do not yield that kind of an awareness, which other efforts do.

So, what government can do here in terms of for example, the there is a rate differentiation for government supported efforts and, and the there is you know price differentiation in several media department of audio visual publicity has a price differentiation in that context. So, that price differentiation can be extended towards the efforts which are entrepreneurially being made for the societal development and, that can be justifiably weighed not just against the rules made, but by the rational panel and, it should be open to the public scrutiny as well.

So, that larger brand awareness about such kind of efforts can come to fore, I will just quote one example many people andmany of those who required such kind of an a help, they know Arvind eye care and that is a wonderful effort which has been made by this organization as far as you know of thermacare goes.

But sometimes I find people who do not know about such kind of efforts and, who are not aware about such kind of efforts, although these efforts now have taken a very large shape, but I m very happy to share with you when you go abroad and, once I was talking to a clinic which is run by the name of doctor Consorta in Brazil Sao Paulo.

That clinic is focusing on masses through entrepreneurial effort definitely, but bringing in health care at the level of masses. So, we were talking to those people and,we said that your model resembles many models alive in this world.

But you know from where do you take the this inspiration and how whom do you imitate. So, they immediately named Arvind eye care. And, that was a delight for us to understand that in Indian organization who has been making such kind of efforts in terms of innovation, in processes as well as health care.

They are known worldwide though not so, you know or good nicely known in India but not so, much known in India as they should have been kind of. So, that is that is you know taken where government can put in as far as this efforts course. Now, come let us come to corporates, what corporates can do there is a CSR, policy.

Wherein people have to spend a particular percentage on socially responsible projects and, it is almost it is mandatory, there are some legalities associated with such kind of efforts corporates are being robbed in corporates are becoming more socially agile and socially concerned, that is for sure things are changing.

But the point is that what actually corporates should wilfully do, how corporates can nurture the environment of innovation with an entrepreneurial perspective rationally it diverting those things towards their organizational development and profit development as such, but having a context of sustainability there.

I was talking to few companies who are into the business of fertilizer, manufacturing, it is a debatable kind of a thing, they also shared this kind of a concern, they just cannot go away from that business so, easily fertilizers are required, you know for further growth of food grains.

But it has become a matter of debate in due course of time that, to what extent we should be using those kind of things and, there is an alternative side of the farming methodology, which is now being propelled and now being you know projected. But what fertilizer companies should do. So, have they been infusing and money for technological development as such, if they are it is a positive sign for example, I have been talking to sugar industry. people.

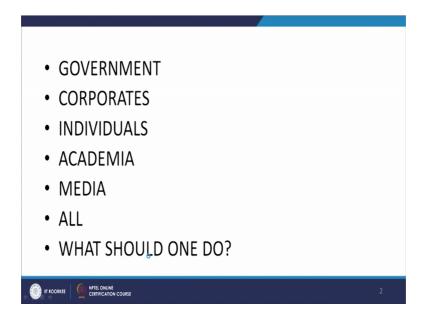
Now, what kind of you know aspects they are employing as far as utilization of energy goes, forare they infusing innovation, for you know rationale usage of energy, for their for sugar production or, they are going for conventional means and methods. What I have realize in due course of time sugar industry is working in three areas on generating electricity, or power generation sugar manufacturing as, well as by products in terms of alcohol, which is now tending to become a major product, or by the sugar industry.

Now, what kind of effects that alcohol production would bring in far as our societal, aspect goes that has to be seen and that is debatable also. But could we think in terms of some vertical integration processes for further rationalizing sugar production and, power generation and not so, much depending upon alcohol production, or let us say could we think in terms of further rational utilization of bogus.

Could we bring in other resources in this process, while we were developing this machine of for briquetting, forests bio residue based briquetting and, I showed these briquettes to some of the sugar manufacturers, they said that it can well be utilized in their process. And they can spare bogus for let us say paper production which can definitely positively effect on as far as reduction of cutting the trees and reducing carbon emissions so, that that can be one part, but have they been trying for such kind of thing.

So, corporates they have to think in terms of lots of technological innovations and, lots of you know work culture innovation for actually thinking in terms of sustainability. And those have to be associated with entrepreneurial results as such so, that is what they can do, what individuals can do.

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Individuals they must have a portion of their work lives and their personal lives associated with, direct impact on as far as innovation and sustainability goes if not entrepreneurship kind of. And we should develop a culture ofdeveloping future entrepreneurs in our house, by promoting youngsters to go towards entrepreneurship, as such that can that it is a long point to be discussed, but and institutions are working hard on this.

But the point is that individuals they have a direct role in dialogue, their actions, discussions and, nurturing innovation at every level in let us say household management, or waste management, they have to bring in locally developed ways and means of as far as managing their own lives with innovation goes so individuals.

Then in our country I have found that there is a lesser culture of interaction of individuals, or people in daily lives with intelligence, or who is working at research levels and those kind of research seminars, or conferences are being attended by the people, specifically connected to those kind of subjects and not by masses. So, then definitely you know academia can organize seminars and, discussion forums for people who from all works of life.

People from all works of life, apart from the students as and specifically connected people. Now, academia has further and a very large role to play as far as innovation

sustainability and entrepreneurship and sustaining, you know innovation sustaining conditions also.

Where in academia has to take a call that major research diversion should not be random, but it should be in coherence with each other, as far as inter disciplinarity goes it you know several department and, several researchers should be coherently diverted towards a larger goal, that is one part so, slightly a difficult part.

But to start with academia can think in terms of diverting major attention towards, innovation having direct application for sustainability and societal causes which can easily be done. And, then several large researchers can be deeply associated with each other. So, culture is being nurtured and developed and, and wherein people are made aware of what is going on besides their own domain and, how they can will associate other domains with their domain, or get associated with other domains to bring larger results that is definitely coming to fore.

But for example, in my stream management and the market development and those, we have not been witnessing inter disciplinarity at large wherein we have not been exactly focusing on the applications of the art of management and market development and entrepreneurship with lots of efforts which are going on.

So, as I have been mentioning time and again that, we were focused focusing on you know we focused upon, developing or utilizing forest bio residue for fuel purposes or energy generation purposes and so on. And it is a huge resource and a waste actually, which has to be utilized somehow to come out of the menace which it creates in terms of forest fire. So, we have been working on that and lots of interdisciplinarity was associated or had to be associated with that kind of a cause, wherein we had to bring in people from mechanical engineering and, we had to bring in people from alternative energy sources.

We have to bring in people from rural technology, we have to bring in scientists from several works of in students from several works of lives and so, on. And then lot of brainstorming was done and lot of you know, roles were being played in due course of time to develop a single machine by so, many kinds of people.

I remember a project which was which has been nurtured and still is being nurtured by my friend professor Agrawal, professor Rajat Agrawal on you know low cost transportation, in terms of enhancing the efficiency of peddle based rickshaw, to make it more comfortable and efficient.

As far as it is speed or you know kind of other elements go. So, that it can bring in more money for the rickshaw puller as well as more comfort for the customer. And, it can become a viable alternative to several transports and, because it does not requires any sort of energy support largely, or may not require any sort of energy support, which we which we foresees, it will become an environment friendly mode of transportation which is a wonderful thing to be seen for future generations.

So, these kind of efforts are being made but in pockets and, these kind of efforts have to be largely propelled. Wherein you know physical form of output should come in, in terms of as far as bringing in innovation for the usage of societal development and, sustainability in due course of time.

Media has a very very large role to play as I can foresee. We have been approaching several channels, or media vehicles for, popularizing the kind of efforts today educational institutions have started engaging, public relations related organizations for propelling the kind of efforts, which they are making so, that people get aware of that.

So, many things are being done and entrepreneurs come forward and get associated with academia, organizations they support academia with more funds to you know propel those innovations, but again that is very specific and that is pocketed, because that might not bring in direct advertisers to support such kind of news releases, or let us say media releases.

And if advertisers do not come from where media would recover their costs of time and space but then again there has to be a debate on that, does media think in terms of a bringing in advertisers, who can relate themselves with such kind of efforts, through specially designed campaigns and, I definitely lured the campaign for example, [FL] by TATA tea.

Which has a social cause and social element to that and, definitely it is a commercial product and, everyone has a win kind of a situation so, it is propelling a particular social

cause. So, such kind of campaigns can be devised for propelling the efforts, or let us say making such kind of efforts visible for the people and media would also not lose on, as far as their possibility of revenue goes.

So, what should we do, we should do everything and who should be bring in first there is no first and, second on this we should bring all together as far as these efforts they go. So, and what specifically has to be the kind of sequence first is resource allocation.

And, it is a very important thing to be done one must come out of the frame of a structured accounting processes those are relevant those are to be followed mandatorily and, one can only measure business and entrepreneurial, preneurial efforts and even non entrepreneurial efforts for such kind of things.

But definitely while keeping that that frame aside one resource allocation has to be thought of in particular portion, with a long term benefit and gains associated with those kind of, such kind of innovations and efforts and sustainability and societal development as I said that, you have (Refer Time: 24:40) long back thought of going to the business of part, steal, and scientific education and that was not a business for him.

So, but he wanted to all these things to be associated together, in a larger frame of contexts. So, scientific education would come so, definitely scientists would evolve and those scientists definitely would contribute, in their organizational development as such but that has to have a very broader frame of thought.

And definitely TATA's they have re fruits of that so, that is quite visible also. So, then there is a cultural aspect to be focused upon you visit, several countries for example, Singapore is definitely a good example of how they roles to heights by developing a culture and environment Japan definitely holds, respect amongst people on these kind of aspects.

And they are definitely monitoring these sustainable aspects related to innovation and entrepreneurship and, and so, many efforts are being made, for example Singapore they definitely utilize desalination for, their water needs and they have tried to curtail the cost as well and, they have gone for rooftop agriculture and wall based agriculture, or let us say you know growing plants on roofs and so, on.

And they have been working on all works of lives with innovative perspective, which has larger entrepreneurial results as such the Scandinavia Denmark Norway and, all these countries they have been focusing on sustainable use of their resources.

So, culture has evolved and that culture is reflected in the curriculum, as well as the imparting of education as well as thought process of the people, government policies and everything altogether. So, diverting the attention of all towards such kind of a thing is the most important thing which is required.

Youths has to be diverted from a thought of only self-opulence towards, their contribution towards societal development and as I said, when we were opening up this discussion that sustainability has to be seen, with all the three perspectives the generation which is following up, the generation which is ahead of someone and, generation which has also the generation which has yet to come.

So, youth has to be made agile on these accounts, that how they should be thinking in terms of such kind of an opulence, which would be there for after they live.

So, youth has overtly been focusing on gaining money for their own usage and practically enjoying their lives. So, that has not only socially depleted the situation, but marketing wise also and entrepreneurially also and, and larger market development also.

We have found that organizations are not getting benefitted and, one hint on this is that, there is a context of customer loyalty which had had been there.

Now, organizations are losing upon that because the youth is thinking in terms of just, their benefits from wherever they get those benefits. So, they are not willing to sponsor, or support the organizations with a particular kind of a customer loyalty. Because of the marginal gains which you know the competitors, or let us say substitute and substitutes and alternatives they give them.

So, that is one part the other part, which is very important to be understood here is that, there are several elders or people beyond a certain age within a certain age bracket or beyond a certain age limit in you know kind of late fifties or early 60's.

Who have lots of potential available with them, to be utilized for a longer time, for you know the societal gain as well as propelling the economy or contributing within the economy.

These I have found many people specially in you know larger organizations, wherein people have worked hard to come up to a certain level and, now they are losing the sheen in their work lives and they are diverting sort of their attention towards their retirement, planning and what they would do after two three years.

And for coolly spending rest of their working lives and, then moving away and living their lives happily and they are focusing more on settling their families and, supporting the you know family at larger level, slightly getting away from the main cause of what they have lived up to. So, this lot or these people have to be reminded of that they, still have to play a very efficient role as far as the societal development and, you know innovation perspective goes.

Because they have accumulated knowledge which definitely has to be precisely utilized for, propelling the innovation which has yet to evolve and that knowledge has to be utilized cumulatively and in coherence with a so, many other resources.

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- RESOURCE ALLOCATION
- CULTURE
- DIVERTING the ATTENTION of ALL
- YOUTH from ONLY SELF OPULENCE.
- ELDERS FROM RETIREMENT
- UNEMPLOYED from VOLUNTARY UNEMPLOYMENT
- CRITICISM and SKEPTICISM
- DEVELOPING BELIEF



So, then there is an element of unemployed people from you know, the section of voluntary unemployment.

I have personally witnessed in many of the states, in India that voluntary unemployment is rising because people, they have slightly you know that gained accumulated wealth through several measures of selling their lands or, they are getting, you know foreign remittances from the family members who go abroad to study.

And that remittance is supporting their livelihood very comfortably in wherever they are staying and so, on. There are several things which are happening around and people are tending to move away from work at all and, they just want to live their lives happily by having some bank deposits and so, on.

So, it is a part of a economic structure, which we are have going through the banking system is gaining through their deposits and somehow, but again we are losing upon a very good potential workforce, which can contribute at a larger level as far as their lives go. So, such kind of people have to be reminded of as far as, you know voluntary contribution towards the development of society and innovation and, and the once they would contribute definitely they would propel in few things which definitely would propel innovation and so on, the cycle would rise.

So, then there is an aspect of criticism and scepticism, which is a software part, but has to be the part of the cultural development, we should not be over critical and sceptical on things, whatever are going whatever is going around us. And we should not question almost everything which is going around us.

First we should propel or let us say, we should propose our specific role in the societal development and, we should play that specific role in the societal development and, propelling innovation. And developing the environment around innovation and, then we should be thinking in terms of you know questioning which is happening around us.

So, there are organizations for example, Agasthya foundation which is playing a wonderful role in bringing in science to the grass root level, at the village level at the levels of the individual and you know taking vans, or even taking scientific experiments on motorcycles to the villages for developing a scientific acumen of the future youth of India by educating children and, that effort is laudable.

So, that is what I am trying to express here, that those kind of efforts have to be blown up and, people should know about such kind of efforts that is that is what I am referring to

at this moment. So, the ultimate aspect is to develop belief that things would change if we contribute positively.

Thank you.