## DECODING THE SYSTEMIC CHALLENGES OF WOMEN IN AGRICULTURE

Ft. Ireena Vittal



## DECODING Impact

[00:00:00] Rathish: Today's conversation Ireena, specifically focuses on women in agriculture. Traditional notion of agriculture has always been around this topless, moustached man. There is a certain invisibility of women in the agriculture itself.

[00:00:23] Ireena: And so I'm not sure the issue is about disadvantage, because I don't want the woman here to be a victim.

[00:00:28] Ireena: This woman is a producer. It has nothing to do with whether the woman is involved or the man is involved. I think it has to do with what drives productivity improvement in each value chain. I think the real issue there is, does she have agency? Because most Indian women, it's fascinating, most Indian women by the time they're 30 will tell you, my life is over.

[00:00:46] Rathish: It's an intergenerational dividend. It's not just that the woman gets better, it's just that the children of these women get better, daughters get better.

[00:00:52] Ireena: When men accept that their women building large businesses which touches the system is not going to besmirch their honor. So if you had more women running banks, if you had more women, so there's a little bit of that, that needs to happen.

[00:01:08] Rathish: Unless we increase the value for agriculture as a whole, increasing value for women in agriculture is difficult. This is a social movement, and social movements are not going to be won by individual women.

[00:01:19] Rathish: Hi, you're listening to decoding impact with me, Ratesh Balakrishnan, where we engage with exceptional experts, on systemic challenges that impede seemingly simple solutions, that can solve population scale challenges.

[00:01:33] Rathish: Farmers have always been celebrated in India.

[00:01:36] Rathish: You know, if you go back to the visual of Jai Jawan, Jai Kisan in the 1960s, you will see this. This bare chested, mustached, agricultural farmer with an axle in his shoulder, feeding the millions of people in India. What is missing in that imagery is the woman who constitutes 50% of the agricultural workforce, and actually gets paid 60% less than all the men.

[00:01:59] Rathish: Now this absence in the imagery is important because what is invisible in the imagery becomes the popular imagination and often becomes the mental model that informs market behavior and policymaking. Today's conversation on decoding impact is about how do we make women an equitable partner in agriculture across all value chains.

[00:02:21] Rathish: During my conversation with Ireena Vittal on this topic, we spent close to 50% of the time talking about the role of farmers and the agency of farmers

and agricultural value chains today. This was important because if you don't improve the agency of the farmer, it is very difficult to talk about how do we empower women farmers specifically.

[00:02:41] Rathish: In the next half of the conversation, we talked about, what does it take to really create an equitable representation for women farmers?

[00:02:50] Rathish: And we talk about how social norms, leadership representation and concerted action by a wide range of stakeholders is necessary to make it happen.

[00:02:59] Rathish: Ireena Vittal is one of India's most prominent thinkers and consultants. on the issue of agriculture, urban development, and emerging markets. She's been a partner at McKinsey Company for over 16 years and subsequently been on the board of a wide range of organizations, including Wipro and HDFC. She's somebody I've had the pleasure of talking on a wide range of issues that stand at the intersection of development and markets.

[00:03:27] Rathish: Ireena, thank you so much for joining us today.

[00:03:30] Ireena: Happy to be here.

[00:03:32] Rathish: Ireena, I've spoken to you about technology, I've talked to you in the past about property. I've heard your podcast on agriculture. If you can briefly just give us your journey about what you've done so far, and also what got you interested in agriculture overall, I think that'll be great as a starting point for our conversation.

[00:03:51] Ireena: I think I got into agriculture by accident. My first job 30 years back was with Nestle, which is food. And that made you think about food value chains differently from the way an average citizen or a consumer does. And then when I continued my work with consultancy McKinsey, I spent a lot of time working on these value chains: dairy, poultry, fruits and vegetables.

[00:04:20] Ireena: I worked with a whole bunch of retailers and then I got lucky because I worked with the government a lot on the future of agriculture, how to think about food security, the role of FCI. How do we think about food processing? So it was a series of individual projects, which suddenly one day became a pattern, and then you add on to it the economic understanding about at that time, 60%, now 46% of Indians being employed in agriculture, and you suddenly realize what a crucial sector it is for the future of India.

[00:04:54] Ireena: So that was my introduction, and that's been my learning on agriculture.

[00:05:00] Rathish: Yeah. And a lot has been happening around agriculture recently, you know, the, the Farm Laws were a big moment. There was a lot of discussion on that. Currently with the conversation around what India has to go, the 51% question of number of people working in agriculture becomes important. Today's conversation, Ireena, specifically focuses on women in agriculture.

[00:05:20] Rathish: And I just want to share my thoughts and then have, you know, your views on this as well. I think the traditional notion of agriculture has always been around this topless, moustached man who is actually working in the fields and creating value. I actually went back and looked at all the posters of Jai Jawan, Jai Kisan.

[00:05:39] Rathish: And none of them had a woman, right? The Jawan was a man, the Kisan was also a man. But the numbers are staggering. I mean, 80% of women in India work in agriculture in some sense today. And a large part of value chains, in some sense, 60% of all sugarcane value chains, in some sense, have women employed.

[00:05:56] Rathish: And there is a certain invisibility of women in the agriculture itself. I wanted to get your thoughts on why that is the case today. Is it just the question of how norms are being discussed overall around women? Or are there specific aspects in agriculture that makes this invisible nature of women more prevalent?

[00:06:15] Ireena: I think it says a lot about two, three things. One is just the norms we have on social power. Second is a lot of the women are actually unpaid wage workers in their own plot of land. Rich farmers' wives don't work, but the small farmers' do. And when you have a large part of India's land, almost 86% of landholding being very, very small, you find that a lot of these women are workers who are unpaid.

[00:06:51] Ireena: The land doesn't, the land title is not in their name. Historically has never been, nobody ever thinks about it. It would create social unrest if anybody were to push it. So you're talking about the workers and not necessarily the owners. And that's been the second reason why they're invisible because the land ownership is still in the hands of men.

[00:07:12] Ireena: And when you look at the money that the government will give, whether it's in Telangana or part of the national thing, the money actually goes to the land owner, which is the man and not necessarily the woman. And it's interesting that it's also to do with disguised unemployment.

[00:07:26] Ireena: So in the last couple of years, the reason this has become visible, at least in villages, it might not be visible in urban India, is because when men migrated out of Bihar, when young people migrated out of Punjab, a lot of the women became decision makers even in their small plots of land. And one of the most interesting things you see now, post COVID, is a lot of these women are getting

crowded again, because men are coming back, and decision making rights that they had which they've got used to, are being pulled back again. So I think, A, it is norms. I mean, when you look at the Russian posters about the woman holding the hoe, it was because so many men died in the World War. When you talk about the American poster with the woman in Boeing, it was because all the men were fighting.

[00:08:17] Ireena: In India, we never had such a thoughtful exercise on who does what. There's been no trigger for it. And as disguised unemployment is taking men back into agriculture, this journey will continue. It will change only if women were to become decision makers and landowners. But that's not happening in my lifetime.

[00:08:37] Rathish: Wow. On that optimistic note, you know, I want to move on to look at what does this power equation actually manifest as? I mean, I was recently listening to this podcast saying how many poor people do you know? And even when I talk to people who are entering philanthropy right now, their understanding of poverty is very urban.

[00:08:58] Rathish: Okay. They think of beggars. They think of people who are working in environments. When we talk about this power shift, one is, and you highlighted this decision making power. The second is who gets the money, but what are the ways are actually women disadvantaged when they work in agriculture?

[00:09:15] Ireena: I think the real issue is the value does not accrue to them, right? That's the real issue. Some of it is a social woman issue. Some of it is an agriculture issue. And this is also better understood when you disaggregate, because agriculture is not one monolith, right?

[00:09:34] Ireena: So if you look at poultry, where women play a huge role versus dairy, where women play a huge role. Fruits and vegetables, value chains, where women play a huge role versus grain, where they play a role in paddy at the time of sowing and cutting, but not necessarily otherwise. You can see the dynamic shift on two things.

[00:09:56] Ireena: One is on the value that accrues to them or their families, how much comes into them. And the second one is how much of skilling of the women happens so that their voice improves. So, right. And so I'm not sure the issue is about disadvantage because that I don't want the woman here to be a victim. This woman is a producer.

[00:10:19] Ireena: The question is that this producer is not getting paid for what she's producing. And the question is why, right? And I think the reason is because each of the value chain gets monetised differently. In Tamil Nadu, when you look at the woman employed in the poultry value chain, and she is part of the poultry value chain, she gets paid per bird, per kg, every week.

[00:10:42] Ireena: Now, whether it comes to the family kitty is a function in essentially of payment structures and of who owned the bank account and that becomes a social problem, but she does get paid for it. In Dairy, if she's part of the cooperative, she gets paid for it. And by the way, one of the biggest lessons you've learned from Amul's cooperative movement was not only did the family make money because the animal tended to tenderly by the woman produced more, but the woman took the lessons on hygiene and health to her family. And you see cooperative villages improve health standards, not just of the animal, but of the family. Right? And that was also a lesson for her. And when you see this happening in cooperatives, which include women, you suddenly see their aspirations change. And their aspirations change, not so much for themselves.

[00:11:36] Ireena: Because most Indian women, it's fascinating, most Indian women, by the time they're 30 will tell you, "My life is over", right? Because perhaps they get married at 18 - 20, and they've produced their 2.2 children and they don't see any escape. Right. But the aspiration is for their kids. For their daughters and in some communities for their daughters-in-law.

[00:11:56] Ireena: So you see that wherever the cooperative comes in and wherever she gets a voice, wherever she gets confidence, you see aspirations changing, right? And that doesn't happen so much in fruits and vegetables because the market connect is still through the man because the market is dirty and it definitely does not happen in grain, which is trigger, which is owned by the MSP regime.

[00:12:18] Ireena: And therefore the interaction with commerce is handled by somebody else. But I would say to me, any producer gets fair returns for output, which she does in some cases and doesn't in some cases. They get knowledge and then become better. She gets it intuitively. She doesn't necessarily get it in a formal structure unless she's part of a cooperative or part of a value chain.

[00:12:44] Ireena: This gives her confidence to dream more for herself and her child, which happens where she gets the money. It doesn't happen in a lot of places where she doesn't get the money, but it also happens where a collective gets formed formally or informally. And then she gets risk appetite when she's able to create assets.

[00:13:04] Ireena: And that's the place where this is the weakest because the property rights allow her to, you know, collect wealth, to be able to take more risks. And that's where I think she is very disadvantaged and perhaps even her husband is.

[00:13:20] Rathish: Women farmers are not just farmers. They have distinct advantages in certain cases. But are there other cases where it actually is more effective for businesses and for agriculture itself to have more women farmers?

[00:13:32] Rathish: Are there parts of their work where they're actually have a distinct advantage over men in what they do?

[00:13:37] Ireena: Well, I'm assuming all women are smarter than all men. So that's an advantage. That's a given. Right? No, I'm just kidding. I don't know. You know, I don't know. I don't think, I don't think agriculture requires a gender based skill inventory. I don't think so, right? I think men can be as good in managing chicks as women are.

[00:14:00] Ireena: By the way, men do it because in North India, or in parts of North India, women are not involved in poultry, but men are. So I'm not so sure. I wish I could tell you that women take better care of chicken and buffaloes because they are motherly, but that's really not true, right. I just think, I just think they do it because they hang around in the house and, and it's actually the death of the chicken or the death of the buffalo or the low yield of the buffalo happens because the house is dirty or the intermingling of the two is is very, very high. I think the one place where potentially... see this whole myth of this producer suddenly getting attached to a big company,

[00:14:44] Ireena: It is a bit of a foolish myth because you will never ask a micro SME to supply to Maruti.

[00:14:51] Ireena: But you make a micro SME here to supply to a Nestle or to a Unilever, it doesn't happen.

[00:14:57] Ireena: If it happens, it happens as part of value chain improvement and it happens in parts. If it happens, it happens as part of CSR. So I think the one thing that you do see in places where there are subsistence farmers, which has nothing to do with, with the market or where they're so small that they can't go to market as they are, as you do see the self-help group kind of effort bring collective information, knowledge and power.

[00:15:25] Ireena: So to me as an intermediate step, given the industry structure that we have now, maybe, maybe, and men can also form collectives. I'm not sure it's a woman thing only, but I have seen a lot of women collectives do fantastic work in agriculture, as part of the SDG waves, you know, the SERP work in Andhra Pradesh, the Jeevika work in Bihar, the work in Tamil Nadu, the work in Karnataka, in Kerala.

[00:15:53] Ireena: These are all great examples of where we've seen women collectives come together to build businesses in poultry or in dairy in some cases, definitely in fruits and vegetables, in a whole bunch of places. But again, there's nothing which stops men from creating collectives as they have in Maharashtra.

[00:16:14] Ireena: Maharashtra has some men collectives.

[00:16:18] Rathish: Right.

[00:16:18] Ireena: So sorry to break your heart, but I don't think there's anything unique that women can do in agriculture.

[00:16:23] Rathish: It was always worth asking, Ireena.

[00:16:27] Rathish: Before we solve for women in agriculture, we have to solve for agriculture itself overall.

[00:16:32] Rathish: And if broadly there are three places, which is really the livestock, commercial crops, and grains, the agency of the farmer and their ability to sort of negotiate is different in each of these cases, and the least being in grains. And when the agency sort of, and that, under that ambit, there are then gender norms that play into what then can a woman do.

[00:16:55] Rathish: And so laying out the broader context of agriculture, and then within that context, the role of women and the norms that we discussed earlier becomes important. The second is why is this unlocking value important because as you rightly said, it's an intergenerational dividend. It's not just that the woman gets better, it is that the children of these women get better. Their daughters get better and this has come up in every conversation we've had saying, "Who's your greatest cheerleader in a village?" "My mother." You know, she says kuch to bano zindagi mein, right? That's really the line I've heard again and again. So the intergenerational benefit of why we should invest in this is also important to sort of come back to.

[00:17:27] Rathish: I want to spend a little bit more time on this right now. Stock of agriculture is one thing and all value chains as being the same and they're very, very different. And if I take three examples, right, one is an example of livestock where you said the woman in some sense owns the livestock, she's engaging with the market and then there is greater access.

[00:17:44] Rathish: Second, there is, let's say commercial crops like sugarcane, coffee, tea, et cetera, which are slightly more organised structures. There is industry procurement that is happening and the number of middlemen is limited. And the third is the MSP model, which is rice and so on. Which in some sense is a combination of own consumption plus market and all of that.

[00:18:03] Rathish: And if you look at it, all of these value chains in three dimensions, one dimension is the ownership and the engagement of the market itself. As you rightly said, in livestock, it's much higher. Fruits and vegetables, the market is a little dirty. MSP, it's probably everybody's disadvantage in some form. The second thing I wanted to talk about is also the nature of work, where in livestock as you highlighted, it's the tending of the word itself and that has actually immediate returns.

[00:18:27] Rathish: And the third is the capital flow itself, which is how much money that the woman can actually have access to. Do you see different behaviors in these three different types of chains across all of these aspects, which is, who engages with the market? What nature of work they do? How does the capital flow?

[00:18:43] Ireena: Yes, and it has nothing to do with whether the woman is involved or the man is involved. I think it has to do with, what drives productivity improvement in each value chain. If you look at livestock, right, if you look at livestock, 60% of [00:19:00] the cost of the business, is in feed.

[00:19:05] Ireena: And 15% - 20% is in the, say the chick, right?

[00:19:10] Ireena: And most of the yield improvement is in improving the quality of feed and the quality of chick, which is science. And therefore, an integrator or a big player makes a lot of difference because no individual owner of a bird or of an animal or a fish can improve quality of feed or can improve the DNA or the breed of the animal.

[00:19:34] Ireena: And therefore, the role of the small producer, which is what we are talking of, ends up being of pure production. So the aggregator or the cooperative will do artificial insemination. In the case of poultry, they will do research on breeds and on mortality. They will give you the right breed of animal. They will give you the injection on the right day. In poultry, they will give you an injection on day 6, on day 12, on day 14, they will give you feed, they'll fine tune the feed depending on price of soya, blah, blah, blah. Your job as a producer is to grow the bird and that's literally tending. Tending to a little baby because the bird will be out in 28 days or 30 days and it has to put on 2.5 kgs versus 2.2 kgs because that's what makes all the difference of profitability. So that work is very bird specific, it's almost like personalized growth of individual birds and that's how people treat it. It's personalised yield of individual buffalos and that's how people treat it. In fruits and vegetables, which is short cycle, a lot of value is in yield, but a lot of value also is in price. Because if you have too much of action, then you suddenly have glut in the market and pricing collapses, right? So the role of the small producer is to do guick in and out. How quickly can you produce?

[00:20:54] Ireena: How quickly can you anticipate, right? And that's where science becomes so crucial for sugarcane or for cotton. I mean, one of the most, undervalued revolutions of India was the cotton revolution that happened in 2002. And because we didn't appreciate it, we allowed it to die. And we went from being, you know, a good producer to the world's largest producer, with really great implications for the whole textile value chain.

[00:21:24] Ireena: And today we are struggling. Africa, countries in Africa are going to beat us and the reason is because we didn't support the evolution of science in cotton seeds, right? But there the small farmer is the protector and is the producer in the literal sense. And the real issue here is how do you balance demand and supply, which an aggregator does.

[00:21:48] Ireena: So, the role of the farmer is actually very limited in unlocking value because most of the value unlock happens either at the science end or at the end of the aggregator who balances demand and supply or who is able to bring value

addition if the shelf life of the product can be expanded, right? And there, the real issue becomes how do you marry these three roles sensibly between the three guys. Grains are a different game.

[00:22:16] Ireena: I mean, in India, for example, the biggest issue in grains is actually to change the mix completely, which is a political question. Neither an agronomic question, nor a market question, right? We are just producing the wrong things and in the wrong places. And again, we don't have science there, but the MSP regime has created so much of inefficiency in the system that politically, it has to get handled politically.

[00:22:41] Ireena: And when you see the growth of say the lentil market or the growth of soya or the growth of maize for commercial or for nutrition, I worry that we are following the same path that we did for wheat and rice, which is a suicidal path, rather than creating the right market. So there the farmer today is actually just a captive producer in some ways with a guaranteed return, provided the MSP regime gets translated into sourcing infrastructure. And wherever that happens, the farmer is de-risked, wherever it doesn't happen, if the systems exist, they transport it to Punjab and MP. And if the system doesn't exist, then they, then they do Dharna and forget about it in 60 days.

[00:23:28] Ireena: The role of the small producer is very, very different in each of the value chains.

[00:23:33] Rathish: I want to take individual value chain, I mean, each of these three categories specifically are in and then get to one level more detail. So one, you talked about dairy and poultry and fisheries for instance, and then we said, hey, taking that integrated approach, ensuring that science travels, is going to be important. What forms can that take?

[00:23:53] Rathish: And, you know, when you see it actually getting done on the ground, how would you sort of see it? You talked about how there are examples, maybe even taking one example of where it is done so that it is clearer, I think will be very helpful.

[00:24:02] Ireena: In poultry, for example, I think India has brought a great innovation to the world, which to some extent, Thailand had to with Charoen Popkhand (CP), but India really brought that out where if you look at, you know, the chicken that you eat. It all starts in the great grandfather farm, right?

[00:24:21] Ireena: There's a great grandparent farm, which can only be set up by a few players because the investment required is at the level of billions, right? In that great grandfather, you're producing a male chicken, a female chicken producing a kid, right? Which comes to the grandparent farm.

[00:24:35] Ireena: And at the great grandparent farm, you're only bothered about pure DNA, quality of breed. So it's like pure research, the way that happens in semiconductors. Right. And this is where the Americans decided in the sixties that Americans like thigh meat. And so suddenly the chicken started producing more thigh meat, right?

[00:24:56] Ireena: And that's the kind of stuff that happens there. So you're changing the bird itself. And that's why when anybody tells me India doesn't have GM, I laugh because all our chicken has been GM forever, right? So I don't know what we'd fight about GM in 40 years after the chicken was hatched. So, and we've had some great Indian companies who've done that.

[00:25:18] Ireena: So you have a GGP plant, right? Farm. Then you have a grandparent farm. Then you have a parent farm, which is where consumption starts. And at the grand, at the parent farm, you produce eggs, which go into a hatchery. They get hatched into day-old chicks, which are then sent into thousands and thousands of small farms.

[00:25:36] Ireena: And in day, between day 28 and 32, they get collected because feed is given to them and the day-old chick is sent and it's a couple of grams and it's picked up, it should be between 2.8 and 3.2 kgs or whatever it is. And the farmer gets paid per kg of weight group. So the GGP can be done, the great grant parent farm which is pure research, can only be done by one or two players in a country.

[00:26:01] Ireena: The grandparent is done by big integrators. Parent farm is done by big integrators. The hatcheries can be done locally. But again, it requires huge investment. But then you have in India millions of people growing these birds for the big guys. So you can see that there is a role for a small producer. But the role for the small producer, A, is contained in terms of risk.

[00:26:25] Ireena: So there's no major upside, but there's also no major downside.

[00:26:29] Ireena: They're okay, because they're not taking the risk beyond a point. And the integrator manages the risk by making sure that no individual farm has more than a certain number of chicks, right?

[00:26:39] Ireena: When you have large farms, the blight can kill everybody. So, in this case, you will see that the value add is in the investment that happens. Amul does the same thing by the way for poultry. They have their own field mills. They have their own artificial insemination research. They have their own injection companies.

[00:27:02] Ireena: And then give it to their cooperative members. In the case of poultry integrators They're not cooperative members, but they're members and they have to learn hygiene. So just think of this value chain and think of what is required here. It's no different than any other value chain in India. And I always find it

fascinating that, you know, the single largest value chain in India is, I think 7% of India's economy or seven point half percent used to come from auto.

[00:27:29] Ireena: And then you look at agriculture and it's 16%, right? So you look at it and say, hey, the agriculture value chains, and there are many of them are quite large. Yeah, they're quite large, right? So, that's, that's one cut and if you understand this value chain, you can see what role the small player will play, and the moment he's alone, he has very high risks.

[00:27:51] Ireena: The moment he's part of this integrated chain, he gets paid per kg bird grown. That's a predictable annuity business that he can get. And now in fruits and vegetables, it's very different. So, if you're growing potatoes, somebody has got the seedling, somebody grows the seedling, So, they are seed producers, right?

[00:28:09] Ireena: They're seed growers. That's a very profitable business because immaterial of what happens down the line, you're getting paid and that's high quality, you have good breeders, et cetera there. And then you will give it to a whole bunch of farmers and they will grow the potatoes and somebody will come and harvest them.

[00:28:25] Ireena: And this is where the value chain in India then becomes weak because usually what will happen in India is all the potatoes will go into the market, right? Because potato is a seasonal crop, some of it will get stored in these large storage areas in West Bengal in UP and they will come out through the year.

[00:28:41] Ireena: Or you will have a potato crisis. But if the value chain was more developed, and it had to unlock more value for our farmers, you would have had different kinds of potatoes being grown, right? Some of which would have gone into processed potatoes, some of which would have gone into chips, like you do.

[00:28:58] Ireena: You see this in Gujarat, where a special type of potato is grown for a player called McCain, right? And there, those farmers do earn a little bit more. So here, the value add is in storage capability, in processing capability. Then in branding and in selling, right? And the farmer and the farmer producer group, if it exists, should have the power to negotiate between the buyer, the processor, and the individual farmer, including the ability to have working capital to sell.

[00:29:30] Ireena: Hey, I don't want to sell. If there's too much of potato in the market, I will keep it for one month or two. Because the reason the price has dropped is because every farmer comes at the same time. And that working capital is missing. So there the role of the collective is to be able to buy time, to be able to negotiate so that all potato farmers in the country are not selling in the same window of 10-20 days which brings prices down and then somebody else is carrying the risk and therefore somebody else is getting the return.

[00:29:59] Ireena: And the interesting question is, what will be the shape of this intermediary? It could be a collective, like you see in Maha Mango, Maha Grapes. It

could be a civil society, like you see in SERP, where the government and the civil society and the farmers come together. It could be pure private play. And each one of them has its advantage and disadvantage.

[00:30:20] Ireena: But whichever form it is, it needs capability. And that's where the system breaks down because the capability to think about what is the investment, to think about extension services to the farmers, to think about commercial capability to negotiate, to think about fundraising capabilities, to be able to raise risk capital.

[00:30:38] Ireena: These are now form and function that you see in any traditional company, right? But how do you now find it at the level of a district? And how do you find it at, you know, smart enough to be able to manage the risk in an unpredictable environment, you're suddenly looking at capacity and that's the constraint that we have to overcome, but it'll also create millions of jobs.

[00:31:04] Rathish: I think the point that I wanted to, also sort of highlight is that in some of these cases that just at agricultural level, before I get into the gender, do you see that dynamics changing or evolving to improve the agency of the small farmer at all?

[00:31:20] Rathish: Like in these three types, where in one case, the aggregator has actually the greater power versus a small holder in the other cases where the choice of grains itself is going wrong. Because my own sense is if you don't fix for it, fixing for women in agriculture becomes a much smaller issue that we have to solve for.

[00:31:36] Ireena: No, I totally agree. I think fixing for women in agriculture is like a double challenge, right? So it's the challenge of agriculture plus the social challenge of being a woman in society, plus the advantage of being a woman in agriculture. But coming back, you know, there's a problem with our industry structure.

[00:31:55] Ireena: I think there are two problems with the industry structure. If you look at this from a place of abundance, not from a place of farmers, right? But could you have, how many people could have viable employment or viable businesses in agriculture? I think the truth of the matter is we have too many Indians in agriculture.

[00:32:12] Ireena: But it's a capital-labour trade-off. And that will happen only when people on the farms are able to invest more in terms of capital, whether it is aggregating and aggregating doesn't happen through ownership and or investing in inputs or in capital, which allows you to trade off.

[00:32:32] Ireena: But the second thing it'll happen only if there are alternate options. We saw this. We are seeing this now in the absence of alternate options, people go back to farming because at least you don't die poor in a village. I mean, there's nothing worse than urban poverty. Rural poverty is better because you don't die. In urban India, you die, right?

[00:32:54] Ireena: So unless you see, unless we fix our economic problem with jobs, we are going to continue to see the current industry structure, but the industry structure needn't be the way it is. Because we are band-aiding on the wrong industry structure. And there's almost a missing layer in our agri industry structure, which we don't talk about.

[00:33:16] Ireena: So, let's just disaggregate this. Production can be micro. Because even if you look at a large farmer in America with thousands of acres, because sunlight falls in a different way, because the soil quality is different, he breaks up his large farm into multiple small plots and thinks about what he grows where and what part of the land he uses for what differently.

[00:33:44] Ireena: If you look at Israel's agriculture system, sitting in Tel Aviv they run these farms. Far away, 200 kilometers away, and they are at micro plots one by one because each part of the one single farm doesn't need the same amount of input because of the way, you know, it has been used in the past. So technically, if you think about it, each of our farmers is sitting on a micro plot.

[00:34:12] Ireena: The issue is, what does he do with it? He doesn't do much with it. Because the people, or the systems, and the people could be collective, the people could be civil society, the people could be private players, not necessarily the end-users, but the aggregators. Whoever is the intermediate layer, which provides the information, insight, and technology to be able to micro farm that piece of land, does not exist.

[00:34:42] Ireena: It exists in the case of the chicken, because the integrator will tag individual chickens and will give you the input for each of the chicken depending on how much of weight it has put on day one versus day five. So it's happening at the level of millions and billions of chicks in India, but it's not happening at the level of farms, right?

[00:35:02] Ireena: And so there are two problems, therefore, with agriculture, there are meta problems of we are not doing investment in the right seed quality and the right soil improvement and water and those are the meta problems that everybody talks about and that's because we are focused on treating this farmer as a poor person rather than as a potential producer and therefore we focus all our money on subsidies and not on capacity and capability, and agri extension.

[00:35:31] Ireena: That's a meta problem. But at a micro level, the issue is because of the perceived risk of Indian agriculture being very high, a lot of these intermediate layers where the actual improvement in productivity happens, that layer is empty. We have producers, we have traders, we have users. We don't have the aggregators who bring value in.

[00:35:57] Rathish: Especially given the risk of climate change, I believe that intermediate layer becomes even more important because we are sort of letting the farmer have all the risks today without the ability to deal with it through science.

[00:36:09] Rathish: If we agree that there are distinct disadvantages for various reasons for women in agriculture, even within the constraints that agriculture largely faces, and if you have to solve for it and make sure that there is at least an equitable distribution of value among men and women, which doesn't exist today, is there a role for businesses to be able to ensure or catalyze a more equitable distribution of value to farmers irrespective of gender?

[00:36:34] Ireena: For sure. And I think again, the answer will vary depending on the nature of the value chain. So in value chains where the value unlock is best integrated, dairy and poultry being, dairy and poultry fisheries being two specific examples. There are enough examples in India where businesses have created value chains, wherever the politics of the local arena has allowed that to happen, because anytime a value chain gets created, some political system that has existed for decades, if not for millennia, gets disturbed.

[00:37:07] Ireena: And since the richest people who own the political system are both in business and in politics, that enablement becomes very critical. So we've seen, for example, poultry get unlocked in some of the southern states more easily than it has in some of the northern states. But clearly there, business plays a huge role in de-risking the whole value chain.

[00:37:28] Ireena: When somebody is integrating the whole value chain, system cost goes down. Which means pricing goes down, which means consumption goes up, demand goes up, and this, the virtual value chain, flywheel then gets created. So we've seen that, right? And that can be both private players, like we've seen in poultry, and collectors, like we've seen in dairy.

[00:37:51] Ireena: We also see this in parts of fruits and vegetables. And fruits and vegetables are very different, because fruit has a gestation period, right? And somebody has to underwrite. Fruits is six, seven crops a year, and therefore it's very different. And here the issue is the investment needed in perishability.

[00:38:07] Ireena: In the case of poultry dairy, it's the investment needed in science and in breed and in feed, right? And in integrating collections so that there is no revenue loss. In the case of fruits and vegetables, it's actually in perishability and in science. Science much less work happens. I mean, just to give you a context, I think China produces more hybrid varieties of seeds in a year than India has since independence.

[00:38:31] Ireena: So we do much less in fruits and vegetables, though we have some heroic Indian companies who try and do a good job of it. And by the way, ICER does a

very good job of it, just doesn't get commercialised. Some of the work that the government side does is fantastic, but unfortunately that system is broken.

[00:38:50] Ireena: But what you really need here is the ability to value add. And the value add comes in two ways, right? One is to change the seeds themselves. If you look at potato seeds in India, one of the world's largest potato producer, I think nine lakh tons or something. The reason we can't process them is because we produce the wrong kind of potato.

[00:39:09] Ireena: We produce the table top potato, right? And while 30-40% of it should become the processing type. So we have to change what we produce, but after we produce, we need to create downstream and opportunity to be able to store it or value add it and so on, that requires investment. So they, there, you need two kinds of players.

[00:39:29] Ireena: You need the players who will use the product, but you also need intermediaries who will come in, you know, add new value addition between the farm gate and the final user. That piece is missing. And it's only now that those guys emerge, but they will play a huge role in aggregating and improving the value add.

[00:39:52] Ireena: And then comes the big guys in the big grains. So clearly private sector can play a role. The only caution I would have is that these will take many forms. The FPO form is good and it could be, it could be a privatized FPO.

[00:40:11] Ireena: I think the real issue here is two things. One is how do you balance power between the small producer and whoever is the intermediary or the buyer? And the second one is how do you build capabilities? The bigger issues, for example, with FPOs is one of building capabilities. You try and transplant a guy from

[00:40:28] Ireena: South Bombay into Nasik to run an FPO is not going to work, you have to build the capacity in Nasik, which by the way is an employment opportunity, right? So the real issue in these value chains improving, not at the meta level of science and technology, but at this, at the production level of value chains is actually capability building and institutional resilience, which will sustain this over time.

[00:40:57] Rathish: A lot of what you've talked about so far, Ireena, for me is, it's true for all of agriculture.

[00:41:02] Rathish: But I don't think we're still addressing the question of how, what does it mean for women? Because we can do all of this. And if the systemic inequalities are only going to get worse, if you don't solve for that problem, how do you approach that question specifically?

[00:41:14] Ireena: I think we should make it about how do these women earn more, right? Because, I don't think the equity question will get solved through agriculture. I think that will get solved through other means of social change but I think if we can

get more money into their hands and more money into their personal hands, you will perhaps also start working on the equity question.

[00:41:38] Ireena: And maybe the solution there is to recognize the context in which most of these small farmer women work. Because again, going back to the earlier point, the rich farmer's wife is not working, right? It's only the medium or the small farmer's wife who's working. And one of the things that we've seen wherever we've seen their incomes increase because you do have women farmers today or women producers today who are earning a lakh, a lakh and a half more, right?

[00:42:08] Ireena: And these examples are old ones like what PRADHAN had done brilliantly in Kesla in poultry, or it is the Injodh movement in Jharkhand or you've seen a whole bunch of these, even in SERP, in Andhra Pradesh I think one of the things you realize is that this journey is a long journey and it actually starts raising the aspirations of the producers.

[00:42:41] Ireena: Because a lot of them don't even think that they could earn a lakh or more, right? Then you suddenly don't go and say, okay, how are you going to earn a lakh? Because that's a scary number and it requires investments, which they don't have. So then you first do savings. You do collective savings. It's actually along the SHG route, right?

[00:43:01] Ireena: But if it can be commercialised, it would be great. So they get permission from each other. They become a collective, they do collective savings. And then you take cost out because they then now start buying seed together or they're buying a fertilizer they don't buy, they get from the government. But a whole bunch of other things, you're reducing the cost and improving the money in their hands.

[00:43:23] Ireena: And then they will slowly start taking some credit get into adjacency. Remember Injat, for example, it was fascinating to see that they started growing marigold. Who would have thought, right? And suddenly marigold was beautiful because flowers is actually a great business because they were collected, they saved a little bit of money and they started growing marigold.

[00:43:42] Ireena: And then they grew marigold for a couple of years and said, "Oh, this works!" So they took a little bit of credit from the government and from NABARD and they suddenly started doing breadsticks as a business, right? So this is an evolution, which is step by step. And it actually starts at every step by raising the aspiration, doing proof of concept, usually collective, because individuals cannot fight a system.

[00:44:07] Ireena: And then building a portfolio of businesses. I mean, think of any small businessman. He has a portfolio of businesses. These women farmers also end up having a portfolio. So they'll have a little bit of dairy. In some places they'll

have chicken, not everywhere. They will have a little bit of grain that they're growing for themselves.

[00:44:22] Ireena: They will have fruits and vegetables, some elements of it in the case, right? And then you suddenly see them, you know, getting four or five things going for them. So in an ideal construct, till such time that these remain small producers and they don't have balance sheets, they're working largely with PNL.

[00:44:42] Ireena: What you do is you create a collective balance sheet for a group at a village level or at a, you know, Gram Sabha level or whatever else it is and then slowly build confidence to be able to do four or five things rather than one or two things. And that's how you get more money into their hands. And then some cases, depending on how much of power they accumulate at the panchayat level, they will start having more voice, and in some cases it might happen, as you were saying earlier, across generations.

[00:45:19] Rathish: And if you take stock of here and now, I think some of this work, which is, you know, women forming collectives and self help groups are better in some states, but worse off than others. But that has already started. Savings, some access to credit is already starting to happen. Are there things that you believe, are not at all happening that actually should happen a lot more of if you take here and now in India, number one.

[00:45:43] Rathish: And second question I want to do again, coming back to the role of industry. Some part of this is social structuring, formations, et cetera, which industry can enable, but it really is the role of civil society and the governments to invest in. Where can industry play a role to actually move the needle on women getting more incomes?

[00:45:59] Ireena: See, on the first one, I think it's important to understand why this is crucial, right? I think it's crucial because there is a trade off that is happening in each of these societies between the traditional norm of family honor, which means keeping the woman away from the market because markets are dirty versus the aspirational value of the income unlock from this family member who happens to be a woman.

[00:46:32] Ireena: This is a battle and it happens in every society. It happened in China 40, 50 years ago. It happened in Thailand, Vietnam. It happened in America 120 years ago. But that is the step that is needed for the woman to literally come out of the house into the market, right? It's the traditional norms.

[00:46:51] Ireena: And in India, these norms of family honor, where you say that a rich man's wife doesn't work, right? I mean, there was a reason why the Korean women of rich men used to be veiled because the sun doesn't touch them. Their fairness showed how rich the husband was. And there was a reason why Japanese women's feet used to be bound because your woman doesn't step out of the house, right?

[00:47:12] Ireena: So this is a historical and it's millennial culture, which in India continues to exist primarily because of how men find jobs.

[00:47:23] Ireena: Men's find jobs in urban milieus through communities. And so even if the Bihari worker is working in West Bengal, what his community says about his family back at home impacts his status in that community and therefore his ability to get a job.

[00:47:38] Ireena: So because the urban job market is still corridor led, there is continued prevalence of this and that's why to break it, you need collective action. An individual woman cannot break this norm. But if all the women in the village are doing it, then suddenly the norm of the village changes. Exactly the same thing that you saw happening during the industrial revolution in UK, where the girls went en masse to work in the mill.

[00:48:05] Ireena: And this is exactly what you saw in China. 30 years ago, when the factories came up and all the women left the village, all the young women left, it was okay. But if only one woman had left, everybody else would have said, see, this family, right? So some of this is an interplay, the economic structure is also an inter, the commercial structure is also needed to break the social norm.

[00:48:26] Ireena: Because what you're really seeking here is permission. Whether you like it or not, permission for the woman to become an active commercial player for the family and for her to therefore have four or five businesses. So I think this collectivisation is crucial not just to get power with the market, but also to break the norm, traditional social norms, which keep her inside the home and prevents her from being an active player.

[00:48:52] Ireena: Because this is the nature of the game, it cannot be done by coming back to your question. Number two, it cannot be done. purely commercially. It has to be blessed by a social intermediate, whether that social intermediate is the mother in law, whether it's the panchayat, whether it is some other construct, it has to come in without disturbing social norms.

[00:49:14] Ireena: Otherwise, this will be a global value chain which has to be destroyed, right? So what can private sector do? What private sector can do at best is in some cases where they are direct integrators, sugarcane, cotton, coffee, tobacco, poultry. These are integrated value chains. You actually could create a mechanism by, like the government has done, which says fixed deposits for old people have half percent more.

[00:49:47] Ireena: And you could create commercial incentives. And I think you could do it not just for reputation, but because of scope three. As scope three is more important, traceability will become more important. And this unknown entities from which you source all start getting named and will start becoming numerically codified, right?

[00:50:13] Ireena: So I think scope three is your best chance. So I think some of this will happen under scope three and under, you know, the system can, the primary final buyer can signal to the value chain player that they would like this to happen, but be very clear that their primary mechanism is sourcing security and price.

[00:50:42] Ireena: So it will happen, it's not going to mainstream this whole thing. This thing will mainstream only when enough players in the intermediate level start making money or start getting valued. That is when this will scale up. But it will happen, it will happen in one of two ways, Rathish, either the industry structure will change because of alternate value of that land or alternate jobs for people and you will see consolidation, which is,

[00:51:09] Ireena: you know, one, zero, given where the economy will go, or it will happen very, very slowly, state after state after state, value chain after value chain, as people realise the risk. So either the upside will be huge because industry structure will change, or risk will go down, scope three risk or sourcing risk will go down because of closer links through these new structures that will get created in between.

[00:51:37] Ireena: But without the new structures, you can't make the existing system

[00:51:42] Ireena: squeeze out more, because there is no value for anybody in the existing system to think of this. You will need a new layer to appear.

[00:51:52] Rathish: Got it. And I think the foundational piece, for industry to even come in are things you've been highlighting throughout. One is land ownership. If there is not a way to shift land ownership to women, I believe a lot of this is shaky ground.

[00:52:07] Rathish: Second is collectivisation and effective collectivisation. Collectivisation that gets to financial activity from savings to credit to market action. And I do believe that that is probably going to be essential. Would that be a fair thing to say?

[00:52:21] Ireena: Definitely the second, I'm not so sure of the first. The first one I think is, is a good to have, but if the role of the, if the value of the family in the inside the family, if the voice of the woman changes, then even if the land belonged to the husband, it doesn't really matter, right? I think the real issue there is, does she have agency?

[00:52:42] Ireena: And the agency in some cases could come even without having to go through this huge battle of land titling. It would be ideal if you could do land titling. But as long as she is considered as an equal member, which she isn't today, today she's considered as unpaid wage, not a co-owner, except when the husband moves to the city, in which case you know, you can see why there's more women are perhaps unhappy that COVID happened for other reasons than the obvious ones.

[00:53:11] Ireena: So I'm not so sure about that. That is a good to have, but you could solve it non structurally also by ensuring that the woman's agency is recognised in the family, which it always does, because money does change the basis of power balance between the two people. But on the second one, yes, I think collectivisation is crucial because that's what will allow learning, which will allow improvement in output.

[00:53:42] Ireena: That is what will allow collective investment in assets, which will improve yield and will improve productivity. And that was, that is what will allow bargaining power. So it's not just for bargaining power. It's also because new learning is required. New asset forms, asset types have to be created to be able to take positions, to be able to take risks. No individual farmer can ever take the risk on versus a market. And this is no different from when you see a whole bunch of Tirupur producers work collectively, or when you see a whole bunch of, you know, small steel guys in, in West Bengal collectively. It's the same concept that if you're very small and you're working with a large market, how do you Understand.

[00:54:34] Ireena: How do you learn? How do you invest more? How do you de risk yourself? And it's by working together. So that collectivisation is not unique and romantic about agriculture. It's about any MSME, right? And that's how if we thought about them, then we would do what any other MSME system. So to me, the day you have a YPO forum equivalent in rural India for women farmers, you've done your job.

[00:55:01] Rathish: I want to squeeze in one final question. I know I'm being greedy here. We've talked about this intermediary layer today, Ireena, and this intermediary layer is all men. Is there a need to shift the gender equation at the intermediary layer and will that actually create value for an increase in income for women?

[00:55:19] Ireena: I don't know whether it'll create value, but it will definitely bring more understanding and alignment especially in parts of India where men cannot talk to these women producers because of social norms. And the interesting question is, why aren't more women playing those roles? I think women are not playing those roles for two reasons.

[00:55:38] Ireena: One is, you need to have assets, you need to have risk capital to be able to do that, right? And unfortunately or fortunately till now, that has been sitting even with men, even when NABARD or banks run a special mudra or whatever scheme for women, it's the women is applying, but the man is using it, right?

[00:55:56] Ireena: So historically, we've never really raised debt and given it to women to say, go do these assets in some places, wherever we have, we've seen that women are as good businessmen as men are, and they fail at the same rates as men do. It's not more or less, but the other reason is because families will tell women that it's okay to grow the business up to a level where you don't have to engage with the government bubbles or with the bank or with the market, because that is when

[00:56:23] Ireena: in their minds, it becomes 'dirty', right? Because either corruption will come in, or you'll have to go and talk to men. And it's fascinating when you talk to women. I never understood the power of Mayawati's handbag till I went into rural India. Because for a woman, the day she owns a handbag is when she's going to meet a bank officer or, you know, IAS officer or a guy in the local government.

[00:56:52] Ireena: And for her, it's a moment of huge pride. Women don't have these problems, right? So the other reason, the other thing that will make this happen will be when men accept that their women building large businesses, which touches the system is not going to be mirch their honor, or the system is not clean enough.

[00:57:14] Ireena: So if you had more women running banks, if you had more women, there's a little bit of that that needs to happen, or the next generation will do it because the next generation is educated. Remember the next generation of women, I mean, a lot of our farmers today, women farmers are illiterate. I would say almost 50 percent of them, if not more.

[00:57:34] Ireena: But the next generation, if they do come in, there's a different matter. They might not come into this Into the stuff sector, but if they come in 50-60 percent of them would have at least done class six, if not class seven, that changes their attitude and that changes the attitude of their family. So we should not forget that the intergenerational change is also an opportunity, even though it's also a risk, because the biggest risk to Indian agriculture than climate change is that it does not appeal to the next generation. And that might be one of the triggers for land consolidation, which we have not anticipated, right?

[00:58:12] Rathish: I think the fundamental structures that we are talking about, both agriculture and gender are very complicated. You know, we could at the end of it, look for quick solutions to solve these problems, but I think we're dealing with norms, we're dealing with an inefficient market structure, and we're dealing with an impending risk of climate.

[00:58:27] Rathish: And I feel like it's a heady cocktail. So solving for it, I think, is going to be a multi-generational way of solving and picking up on the gains that we already have. I hope you enjoyed the conversation, Ireena. I hope this was interesting for you.

[00:58:41] Ireena: It was good fun. I always like talking to you. So it was good fun.

[00:58:45] Rathish: Great. Ireena, thanks so much for your time.

[00:58:48] Ireena: Wonderful. And team, Thank you so much. Take care guys. Bye.

[00:58:51] Rathish: Thank you for listening to Decoding Impact, a Sattva Knowledge Institute production. I'm your host, Rathish Balakrishnan, the founder and managing director of Sattva Consulting. If you enjoyed this episode and the conversations, we

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