

[Automatic captions by Autotekst using OpenAI Whisper V3. May contain recognition errors.]

[SPEAKER_00]

You are now listening to a podcast from the University of Stavanger

[SPEAKER_02]

Hi, welcome to the episode six of the RegInno Podcast by Center for Innovation Research, University of Stavanger.
I am Muzamil joined by my co-host Raj today.
Today we have with us Professor Soumodip Sarkar, who is professor at Department of Management, University of Evora, Portugal, who is also president of Science and Technology Park in the region.
and he has worked quite a lot with the other side of innovation.
And we'll be speaking with him about his research, about his experiences over the last one decade.
And hopefully, thank you very much, Soumodip, for coming to this podcast.

[SPEAKER_03]

Thank you, Muzamil.
Thank you, Raj, for having me here.
It's been a pleasure.

[SPEAKER_02]

Yeah.
So starting straight away, what fascinates you to do research related to innovation?

[SPEAKER_03]

Well, because it's a constantly moving target.
It keeps changing.
So what is innovation yesterday is not innovation today.
And my mind needs constant stimulation.
So short answer is that keeps me constantly.

[SPEAKER_02]

And could you actually recall something, I mean, from your story?
What made you come to this field?
Innovation?
Yeah.

[SPEAKER_03]

Well, my PhD is actually in economics, but related to industrial organization and sort of game theory.
And...
I happened to be working in a department of management and I had to improvise, change my field.
The closest for me was innovation.
And that's why it was a very easy transition because I believe that the PhD training and good PhD training in economics and this sort of IO game theory gives you all the tools to also be a good innovation entrepreneurship scholar.

[SPEAKER_01]

Thank you so much.

I will ask you a very relevant question that you presented with us and our team a couple of minutes ago.

You tried to distinguish between innovation coming out of weird countries and non-weird countries.

Weird being Western, educated, industrialized, rich, and democratic.

How are they different?

Can you sum this up?

[SPEAKER_03]

Well, weird countries, that follows a recent paper on ETP, entrepreneurship theory and practice.

These are contexts where when we think about innovation or we think about R&D budgets, we think about a lot of slack resources, we think about the experimentations, we think about venture capital, we think about scaling up, we think about unicorns.

Yeah.

Okay.

So this is a context where we are, most of us innovation scholars, we are used to thinking about this sort of context.

How do we promote startups?

I'm trying to do that in the tech park PACT.

However, non-weird contexts are different.

Non-weird contexts are, of course, a huge heterogeneity.

They are very different.

But there's one thing that is...

let's say, common among most of them, and that is low resource constraints.

So that's the unifying story.

So where you need to innovate, you have to innovate to solve real problems.

actual day-to-day problems.

And they constantly need to think about what is the best solution, the cheapest, the quickest.

You may not be able to scale.

In fact, that's what happens often.

They don't scale, but they come up with often very effective, low-cost solutions.

[SPEAKER_01]

How do we go around it?

How do we make innovation coming out of non-weird countries scale?

[SPEAKER_03]

Well, I think that's where some so-called industrial policy may help, where you identify that potential.

I'll give you an example of how we can make it scale.

So a lot of this in today's context of the Ukrainian war and also in the Iran conflict, the whole drone technology for me is low-cost innovation coming out of, in this case, Ukraine, which now has one of the best technologies.

And they have been able to scale up.

in this frugal context.

So if you have a strong technological component of the frugal innovation, to answer Raj's question, then it's easier to do the scaling up.

Or if you have, for example, water purifiers, cheap technologies, but which involve technologies, and then you can scale up.

So that's one way.

[SPEAKER_02]

If we talk about the concepts you use in your research, you know, our listeners, they are from diverse fields.

How do you define these different concepts?

For example, frugal innovation, then grassroots innovation, and then your own theory that you have contributed to us bricolage.

And how are they different from each other?

[SPEAKER_03]

Well, these are all related concepts, okay?

So grassroots innovation, and now I'm putting the theory hat, right?

Grassroots innovation does not have too much theory involved.

It's more of a phenomenon.

empirical phenomenon that we find that from the grassroots innovations come up.

So when we think about that, and then the sort of innovations that they do involve low resource, few resources.

So they are low cost and efficient and satisficing, meaning it's good enough innovations.

So that would be frugal.

So frugal is the, let's say the outcome.

So the bricolage would be the process.

Bricolage is how you can grassroots innovators, how they use bricolage, which is making do with what's available, whatever resources are available, you make these frugal innovations happen.

So I think these three things are connected.

And one of the connections, as I find, is that the bricolage is the mediator.

This is what makes it happen.

It's the process.

[SPEAKER_02]

Yeah, so most of these phenomenon, they have been conceptualized based on the global South countries.

So how do you think they can benefit Western and how are they relevant in the Western context?

[SPEAKER_03]

That's a very good question.

COVID was an opportunity.

So some of my research was in the context of COVID, where me and my co-authors, we find that with few resources.

For example, in my case, I did a study on Kerala, how government policy with grassroots efforts, how they were able to contain COVID at very low cost and very efficient.

And contrast that with the Western method, which was you throw

resources and you don't have to worry about constraints.
But with much...
poor results.
So that in itself is a lesson.
There are some contexts where you can show that it's possible to do
a lot with less in the same context.
So COVID context is the same everywhere.
And in the same context, I find at least that
in the COVID containment case, in one particular case, that this was
very efficient.
Again, getting back to the drone technologies and other warfare
technologies, I also find the same thing.
This is part of my research that I'm doing now.
I find how low-cost drones are extremely efficient compared to much
higher drones and also anti-missile drones.
machinery, if you want to call it that.
These are very low-cost, efficient systems that are being designed.
A lot of them come from different parts of the world to support
Ukraine, and they are doing a very good job with these technologies.
So I feel that this has relevance.
This has relevance, unfortunately, in contexts which are less
positive.
COVID is less positive, just as the warfare, but it's a lesson to
us.
What happens is that because the Western context, we don't have to
worry about the constraint.
We forget the constraint moment, the problem goes away, right?
And that's one of the things that when you speak about policy is if
you have constraints, if you're forced to work under constraints,
you have to be creative.
And since creativity is the foundation for innovation, the real
story is when do you trigger creativity?
So in our innovation studies, we have lots of things around
creativity, but these are standard.
But we don't speak much about
creativity under constraints.
In another study of mine, I find that under constraints, you have to
be more creative.
You have to come up with solutions.
So in these two contexts, I find that the solutions were found.
But unfortunately, the moment there are no constraints, forget about
this, and then you go back to the normal standard ways.

[SPEAKER_01]

Yeah, that's a point I want to dig up a little bit more.
So your examples of COVID, water purification, drone, and all of
these come from emergencies, from crises, from low resources, from
constraints.
And basically studying frugal innovation is telling us that
innovation is possible in these really tight settings as well.
But from the flip side, we also know that really high value
innovations, innovations that transform society comes not from
crisis, but from recognizing opportunities from what you said,
really being creative about how to solve problems in the long term.

How do we change the innovation capacities that can innovate under crises to some innovation that can really have a long term effect?

[SPEAKER_03]

Well, I go back to something that Steve Jobs once said, stay hungry, stay foolish.

What he wanted to say was that if you're anxious, if you're under stress, you tend to be creative.

You have to come up with solutions.

So I would go back to that.

If you, and this is very relevant for us today, except we don't feel it.

Europe today is, if you're not careful, it's going to be, it's already been overtaken by China and the US.

You're going to be left far behind.

And we are throwing, we're investing a lot of money.

You funded money.

Very interesting project.

But we could scrutinize this more.

We can ask for more return for the same amount of money.

We can ask for solutions which don't involve that amount of money.

And that we have to do.

So I think it's for us in Europe, it's critical that we think

We think more frugally.

We think more in terms of how can we make the best use of resources we have.

But we have to think of the international scale.

We cannot think about how we serve our customers at home because the competition is everywhere.

[SPEAKER_01]

Yeah.

But beyond Europe, as well, I understand this is very relevant for Europe, but beyond Europe, Europe, because it's still one of the weird countries, right, with Western educated, high, high, high, democratic and all of that.

And also, it has this systems of innovation in place, like venture capitals, for example, incubation labs, for example, technological park, which one of which you lead.

How can we move this knowledge to the developing world?

[SPEAKER_03]

Well, I don't think we need to move them.

There's local indigenous knowledge there.

What is happening is that there are other types of constraints.

I'm talking about resource constraints, but there are other constraints.

Bureaucracy is a huge constraint.

So if these other types of constraints...

were somehow reduced, you're going to see a lot of innovation coming out of these, you know, this mindset that we have to do more with less.

The problem is that these are, that's one part of the story.

The other part is, when you start thinking about high, you know,

high technology innovations from the, from non weird countries, scaling is often an issue.

A good example is many of the startups from Bangalore. Great innovations, but they have difficulty to scale at an international level.

So part of the reason has to do with venture capital.

That probably, Raj, answering your question is I think if we have more structured venture capital, that would help in terms of this sort of innovation.

So broadly speaking and perhaps oversimplifying, I would put two different camps.

One is a policy which involves reducing bureaucracy, giving incentives for these grassroots innovators to do their thing.

And the other is when you talk about technology type with strong scale potential.

we need to have strong venture capital to support them and bigger exposure to international markets.

So many of them don't have it.

So they just focus on the local or national markets.

[SPEAKER_01]

So really designing systems of innovation around the capacities that they already have.

[SPEAKER_02]

Yeah.

So during your seminar, you talked about a paper that was related to the moon mission in India.

Yes.

So I found it quite interesting because you said that the frugal innovation, it lacks theory.

I remember, I recall reading The Wealth of Nations, the word frugal or frugality comes at least 36 times in the book.

Despite that, it has not come into the theoretical frameworks.

So would you like to briefly talk about this?

[SPEAKER_03]

Thank you for the question.

It's true.

Adam Smith's book had these multiple instances of frugal, thinking frugal, or acting frugal, or similar terms, not just frugality.

There were other terms involving frugality.

So what's

One problem is that there is a lot, in terms of research-wise, there's not much theory to, but now that's also changing.

Some of my research uses frugal context, but with some theory which is not frugal.

Chandrayaan's case, where my co-authors and I, we are working on, and that has...

Now we are talking research, right?

So the context itself is frugal.

So using low resources.

But there's a huge difference.

Unlike normal frugal cases, these are high technology space.

So you cannot have a, there's no margin for error.
So there's a special type of technology-intensive frugal case.
And there are very few cases like this.
So that's where we find the difficulty of what is the theory we're going to use.
So it's not frugal in the sense of the classical frugal term.
It's a very, very sophisticated technology space.
On the other hand, it doesn't follow the standard technology intensive innovation cases.
So it's somewhere caught in between.
And that's probably one of the most interesting cases.
And we're going to have more of that, much more of that coming out from all these economies, emerging economies, where they are coming with very good solutions at the world level.
Yet you're using low resources.
And these involve strong elements of technology.
So they straddle different worlds in terms of research.
Now, what is the theory that you put on?
It's a challenge.
But that's one of the things I'm working on.

[SPEAKER_02]

Yeah, perfect.
Thank you very much, Shamadeep.
We could now, as I told you before, that we give our speakers or guests a keyword, and Raj is going to talk about that.
No problem.

[SPEAKER_01]

Yeah, for sure.
So in this series, we follow a pattern where the last guest gives you a keyword and you leave a keyword for the next guest to reflect on from your research perspective.
The keyword that you received is industrial policy.
So would you like to spend a few sentences in industrial policy, especially from your role by leading the technological park?

[SPEAKER_03]

There's a lot that has been said about industrial policy.
You guys work on industrial policy and regional policy here.
So I won't say anything on those, what we already know.
But what we perhaps know less is
The classical industrial policy needs to be rethought in the face of AI.
So AI is flipping all that we know about everything, including policy.
So when we think policy today, for me, is that, you know, what is the AI policy?
So I would sort of put AI policy at the heart of industrial policy today.
So that's the answer to your first question.
I hope I answered well enough.
The second is what I'd like to leave, not surprisingly, frugality for the next guest.

[SPEAKER_01]

Frugality.

Yes.

Perfect.

That's a really beautiful word.

I think this is a really nice place to close the podcast.

Would you like to go ahead and do that?

[SPEAKER_02]

Yeah, well, again, thank you very much for joining us today and our audience as well.

We'll keep on bringing stories and ideas behind academic papers, academic research that shape our understanding of innovation and regional economic development.

Thank you very much for joining the RegInno podcast.

Until we meet next time.

Thank you very much, Muzamil, Raj.

[SPEAKER_03]

Very nice to be here in the University of Stavanger.

Thank you.

[SPEAKER_00]

You have been listening to a podcast from the University of Stavanger.