Talk for Raita Teerpu

It is an honour to be invited to present to you; apologies that I cannot speak your language.

Who am I?

Not a farmer or agriculturalist, so what do I have to offer?
Study of participatory research in all kinds of groups round the world

We are talking at this jury about what kinds of research are good for farmers and agriculture, and about how it should be managed. These are wider questions than whether indigenous knowledge is good or organic better. They are questions about how knowledge is developed, by whom and for whom

I would like to start by telling you something about how the current scientific method which is practiced in Universities started up in particular political and religious circumstances in Europe about three hundred years ago

At that time there was intense religious conflict within Christianity between Catholic and Protestant churches. The conflict was about different religious visions, but it was also about power and money. This gave rise to what is known as the 30 years war, a time of terrible bloodshed when the armies of Protestant and Catholic countries fought each other back and forth across central Europe. It seemed that the conflict would never cease and so much blood would be spilt.

Some of the great philosophers of that time saw that differences of opinion could not be resolved through fighting, and so they began a search for an alternative approach to discovering truth, one that would discover a truth beyond human opinions, and one which would discovered through a reliable methodology of observation, measurement, and experiment. This was the beginning of modern science: religious truths might never be resolved, but mankind could through this method discover truths about the natural world.

The principles of this method are as follows

- Humans are the beings who can think, and all other beings are non living (and by implication higher class people are the only one really able to think)
- We can and must remain outside that which we want to study so our knowledge will be pure
- The world is made up of separate things which can be understood
- There is one truth about things
- Scientific method involves defining these separate things, measuring them, manipulating them, often in a laboratory where conditions can be controlled
- There will be one correct answer, and scientific method is the only way to discover it

This way of knowing and research spread around the world with the dominance of European colonization.
There is a lot that is wonderful about scientific method that over the years has taught us to understand our world and to create for some people unimaginable wealth. But it can be said to be too powerful and focused

leaves out from its benefits many poor people all around the world
takes things to pieces and so is damaging to the whole natural world
develops a technology that is separate from the social world

The other aspect of the scientific method is about control. If we can learn about the natural world, we can control it to our own benefit. And because science is about control it is also about power and money, and so it also involves Government and business. Science has grown so big and expensive, that it can only be funded, and controlled by a combination of Government & Business. Big Science, Big Business and Big Government create what we might call a monopoly on the production of knowledge: there is one truth and it will be supported by the power and money of business and government. It is really important to understand that it is not possible to separate knowledge from power: knowledge is always generated in the service of some group, and naturally this is most likely to be the groups who have power. Also that business is driven by the very short term financial needs of a global economy, comparing this quarter results with the same quarter last year.

A third challenge that scientific method presents to us with is that it is very good at separating out studying things in themselves, but it is not so good at looking at whole systems, at the interaction of different things and processes to make a whole.

And finally, since scientific method is a very powerful tool for looking at some things, scientists will tend to use it to study the things it is good at studying; and politicians will support that research because it is often exciting and eye catching. So human beings have put a lot more money, for example, into biotechnology—because science is good at studying that and it is exciting to do so—than it has, for example, put into small scale intensive farming and horticulture, even though it is arguable that this is a much more effective way of using the land.

I think it is helpful to see that this is a self sealing system, that people who work in it are rewarded for doing what is expected; that the challenges you have quite understandably made are a serious challenge to people whose whole identity is as scientists in this mold

This is a critical view of scientific method and research. I am trying to make these points clearly because they are often ignored. It is important that you don't just take my word for this, but test my view against those of the scientists who are talking to you, because they will see it very differently.

Participatory research

But there is another view of research that has arisen both in the scientific research and study of society. It works with rather different principles

- It is impossible and foolish to think we can separate the people doing research from what it is they are studying
- The world is not made up of separate things that can be studied independently but is made up of many complex relationships which we can never completely understand
- There is an intense and close relationship between knowledge and technology and the social system in which it is practiced
- There can be many different truths depending on the view of different people in different situations; all these may be useful
- While pure scientific research can be useful, much research is better conducted in the real situations where people are working

Participatory research is a way of creating knowledge that started in many different parts of the world: certainly in here in India, in Tanzania in Africa, in South America, and increasingly in parts of Europe and USA where it is seen that traditional science alone cannot solve all our problems. It is both a political movement about involving people; and a scientific movement which says the world is too complex to be understood in the ways that science has traditionally done so.

I hope you can see that these different ways of thinking about research point in very different directions for how we actually do our work

Omar Ali village: creation of gona gobisha, peoples' researchers
Land distribution
Sharing knowledge
Building irrigation system
Reclaiming cultural history
Educating children
Women, men, and now children engaged in gona gobishok clubs, with leadership from Omar Ali and inspiration from participatory researchers round the world.

1. **What is to be the subject of research?**
    a. Who defines these?
    b. Who has power to define?
    c. Men or women?
    d. What kind of problem?
    e. From what perspective?
    f. In whose interests?
    g. Methods we have available define what we can study

Scientists will tend to define in a particular way, according to their view and who funds and supports them in their lives. Farmers and villager will see things differently

2. **Participation**

a. Human rights: Who has right to define the issues?
b. Who has the information?
c. Who has relevant skills?
d. Who is current disempowered and needs to be heard?
e. How will participation lead to better ability to create knowledge?
f. How will participation lead to empowerment? [We learned we are not stupid in Bangladesh]

Participation goes all the way down. It is not a nice to have, an add-on. But people will contribute in different ways, not all bring the same gifts.
And participation is also about building a community of inquiry, a group of people working together

3. **Many ways of knowing**
    a. Scientific research is based on measurement and control; it values certain ways of knowing and ignores others. It has developed powerful tools for studying some aspects of the world
    b. There are much wider ways of knowing
        i. Knowledge that is held in experience of different conditions and practices and local knowledge of local conditions and practices
        ii. Knowledge that is held in stories and traditions—science has its stories; and so do you and others round the world. It is through stories that we pass on our understanding of how the world is and how we work in it.
        iii. Knowledge that is held in ideas and theories—and you have your theories of what works, just as do scientists
        iv. Knowledge that is held in actually doing things, know-how

In participatory research, knowledge develops by a movement through these ways of knowing: often: telling stories, distilling key ideas, trying things out, bringing that experience back to

4. **What is the value base?**
    a. To create pure knowledge
    b. Expansion of global economy
    c. Respect for local traditions and customs
    d. Enclosing the commons
    e. Respect for integrity of more than human world
    f. To serve people

Participatory research tells us that under the right conditions ordinary people in many different walks of life can be helped to create their own knowledge, to test it out in practice, to communicate it to other people, and in doing this they not only develop better knowledge but develop their communities as well.

At its best, participatory research will combine together with different aspects of scientific research, so that many different views are brought together.

Participatory research is more than relying on indigenous knowledge: it may start with indigenous knowledge but will develop it to suit changing conditions

and changing social realities. Remember that traditional societies have their drawbacks to, they can be cruel and oppressive to women and minorities.

Image of participative science

a. All contribute to definition of issues
b. All contribute to both thinking about research and the research practice
c. Community of inquiry develops over time
d. All bring their diverse skills/many perspectives brought to bear
e. Research as a process by which all learn
f. Learning through cycles of action and reflection in everyday life
g. Drawing on many ways of knowing, both local and scientific
h. See the world as a complex whole and accepting the interaction of many variables
i. Developing critical judgement: really thinking together, looking carefully at results, being willing to be wrong
j. Appreciative approach: building on strengths that already exist

2. **What does it need to do this?**
    a. Involving the right people: farmers, merchants, consumers, scientists, government
    b. Opening communicative space
    c. Building trust and genuine commitment—takes time
    d. Bringing different skills to bear
    e. Helping everyone speak and listen
    f. Relevant experimentation
        i. Trying different things in farms
        ii. Scientific measurement for reliability
        iii. Scientific laboratory tests/development

3. **What gets in the way?**
    a. Power differences. Knowledge is always about power
    b. Anxiety and worry, feelings of powerlessness
    c. Inability to see others perspective because of very different frames