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SETTING THE CONDITIONS FOR DIALOGUE

HOW TO BRIDGE FARMERS' AND SCIENTISTS' KNOWLEDGE ON FOOD IN THE PERUVIAN ALTIPLANO REGION

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ABSTRACT

SETTING THE CONDITIONS FOR DIALOGUE

HOW TO BRIDGE FARMERS' AND SCIENTISTS' KNOWLEDGE ON FOOD IN THE PERUVIAN ALTIPLANO REGION

This is a methodological case study. It deals with the question on how to organise a process of bridging farmers' and scientists' knowledge on food sovereignty. The source for this methodological reflection is a workshop that took place in the Highlands of Peru in December 2009 with farmers and community facilitators from Peru and Bolivia.

KEYWORDS: knowledge systems, intercultural dialogue, participatory action research, food sovereignty, and democratization of science.

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1. SETTING THE CONDITIONS FOR DIALOGUE[1]

HOW TO BRIDGE FARMERS' AND SCIENTISTS' KNOWLEDGE ON FOOD!

The classical interaction between farmers and scientists is depicted in the following situation: A scientist visits a village in the Highlands of Peru. He is welcomed by the village leader who introduces him to one of the knowledgeable elders who is has set an altar and is worshipping at the edge of his fields. The scientist presents himself. "I am from the Research Station of the Ministry of agriculture and we are interested in collecting diverse quinua (chenopodium quinoa) seeds."

The farmer interrupts his moment of worshiping and answers: "here you see, this is Ahra (wild quinoa species), a very strong plant, it grows by itself and is very powerful, it belongs in our rituals. We love Ahra. Now even foreigners are interested in our food plants."

The scientist says: "how interesting, I want to analyse it in the laboratory and develop better varieties to launch them for the organic market".

The wise man reacts generously and gives the scientist three different seed varieties saying: "Take them with you".

The scientist shows his gratitude to all the villagers: "you see I am taking three varieties, but I will return more in the future".

What are the terms of the interaction between the villager and the scientist? What will be the luck of the seeds? What processes can generate the empowerment of the villagers in protecting and advocating for their seeds, their food?

[1] This text is product of the workshop "Facilitating the Wisdom Dialogue" that took place in Chucuito, Puno on the shores of Lake Titikaka with a group of knowledgeable farmers from the Highlands of Peru and Bolivia, on the 7th to the 11th of December 2009, as part of the Food Sovereignty Program, organised by IIED, London. (see appendix)

2. TWO DIFFERENT KNOWLEDGE SYSTEMS.

Drawing from this situation one can recognise the interface of two different kinds of knowledge systems. For the villager Ahra, is a strong, powerful, lovely and spiritual plant. The seeds are living beings whereas for the scientist the plant is quinua, and the seeds are genetic resources that can be manipulated and transform into a commodity. The differences of perception about a food plant are rooted in the cultural backgrounds of each one of the partners. The villager belongs to a highland community, and his knowledge and practices are shaped by a cosmovision that considers that everything is alive. This idea guides daily agricultural activities, which integrates community life and spirituality. On the other hand, the scientist belongs to an institutional culture, in which agricultural knowledge is generated by research activities sponsored by corporate agenda and grounded in objective- rational mindsets.

The larger context of this interaction is a long and complex historical and political issue. Here we focus on the past decades, on the contradiction between the so called "modern" and the "traditional" societies: Modern scientific knowledge is whipping off the wisdom that has evolved in thousands of years out of community experience, that has produced a vast variety of food for hundreds of generations creating the hot spots of agrobiodiversity that sustain human life. This erosive relationship is not a matter of superiority of scientific knowledge but a power issue. The agrobusiness, the official agricultural and food policies, the legal systems of intellectual property rights as well as the educational institutions are the pillars that support modern science. This shapes unequal terms when these two systems interact and reinforces the assumption that science is the only legitimate source of universal knowledge. Actually this superiority attached to modern scientific knowledge is endangering the continuity of life in our planet.

3. SUSTAINABILITY OF LIFE IS WHAT MATTERS.

Let's look at the interaction in a different way, from a broader knowledge perspective. That includes to deepen into - what villagers and scientists know, - how they know, - how do they explain what they know and - to whom they transmit their knowledge. These are the questions that define the qualities of two different knowledge systems. From this perspective we can see that although different, both knowledge systems are equally valuable in the sense that both (and many other existing forms of knowing) have a potential to solve human challenges regarding the rights to determine the quality, safety, equity and cultural meaning of food. None of them is superior to the other if we consider sustainability of life as our horizon. Both can contribute to find alternatives to the loss of biodiversity, climate change, the overwhelming invasion of junk food. For the continuity of life in the planet we require a plural convergence of intellectual efforts as well as emotional expressions and the awakening of the senses to disclosure original creative solutions, in other words by the practice of Dialogue.

4. A HUMAN ENCOUNTER

Dialogue, in this case between scientists and farmers, takes place as a process of exchange of cultural perceptions respecting the differences between points of view, understanding each other's categories, terms, ideas, showing empathy for forms of argumentation without downgrading the explanations expressed by the other person. Experiencing this encounter of minds and hearts scientists and farmers can find common ground and act as committed partners. They can open up spaces for surprising outcomes and in this new horizon chances are given to the continuity of life.

Dialogue is not a short term encounter - instead it encompasses a series of ongoing inquiring sequences embedded in an increasing spiral of understanding and inspiration for action. In other words Participatory Action Research (PAR) is the pulse of dialogical encounters.

5. THE SCENARIO

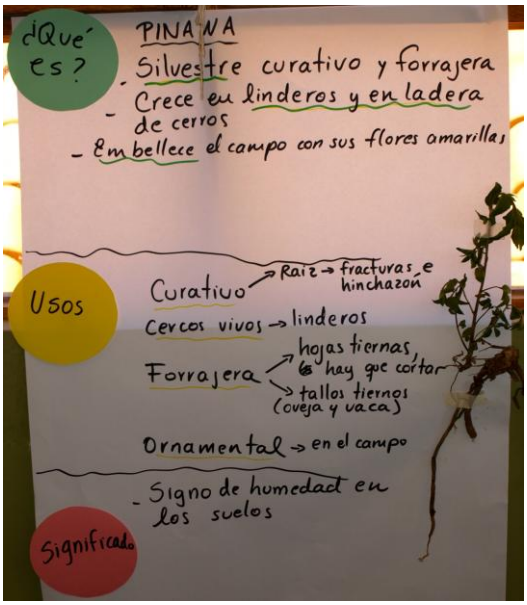
In Chucuito, at 4000 masl, looking at Lake Titicaca, a group of 20 knowledgeable women and men from Quechua and Aymara communities gathered in December 2009 in a workshop to prepare themselves for an encounter with scientists. Following a sequence of scenarios of Action – reflection – action, the farmers generated a world of ideas regarding their knowledge about food. Some of the highlights of this group event are presented and commented to serve as stimulating inputs for the conduction of similar processes previous to the dialogue between members of different knowledge systems.

6. USES AND MEANING OF FOOD PLANTS

One session was dedicated to the food that grows near the lake and on the slopes. Participants collected from the immediate environment of the workshop site several plants. It gave the opportunity to the farmers to reflect in a visual form, according to their own categories, the different names, uses and the meaning.

Totora is an aquatic plant that grows in the Titicaca lake, in wells, in water ponds near our houses. It is very nutritious and has many other uses in construction of roofs or small boats, one can make bags. It is also medicine for animals and when women have haemorrhages. Totora protects us from frost.

It is a plant that communicates meaningful messages to us: it tells us, if the year will be rainy or dry, or if the production will be plentiful or scarce.



PINAWA

Pinawa is free growing curative plant that can be seen at the borders of the fields and at the slopes. It is very beautiful, with its yellow flowers. If you have a fracture or swelling use the roots, for animal fodder just the leaves and tender branches. If you see it that means that the soils is moist.

SIWYRU

Is a plant that grows on the rocks and prairie. Can be used against evil eye, or perspiration in the evening .You can drink an infusion, have a bath …it means good health.

ILLA

Are sacred stones that call your attention near the lake, around the fields. You can use them during rituals, by sowing, during the animal ceremonies, during the harvest. Holding the Illas in your hands nourishes you, give breath to the seeds, to the animals because they coexist with everything that is alive on earth

7. WE ARE WHAT WE EAT

In another moment of the workshop the participants asserted their identities as being different from urban people who don't eat so much potatoes. Farmers underline their preference for local varieties and not the high yielding potatoes that are the favourite of the engineers. They confirmed their appreciation for a great variety of foods that grow in the different ecological zones of the mountain slope. They insisted in the quality of food without the use of pesticides or artificial fertilizers arguing that what they grow in their own fields has the spirit of mother earth that nurtures and energizes them in a mutual interaction.

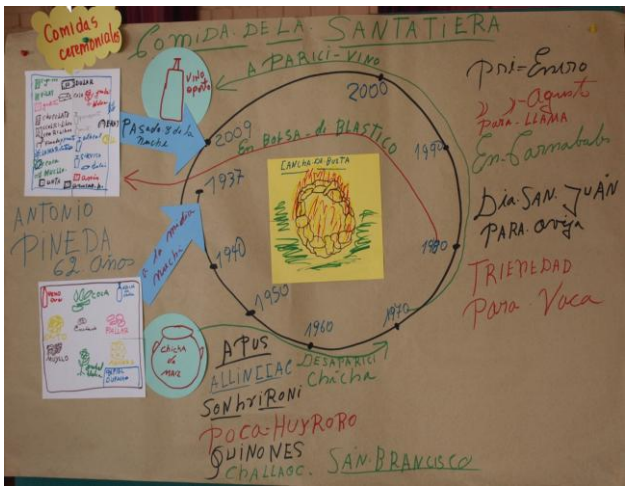
FOOD A LIFETIME COMPANY

Participants presented drawings conveying the idea that life experience has moulded their taste and food preferences. This started even before they were born. They explained how mothers, when they are pregnant have special diets, basically soups made of collected of herbs. During the childhood (from 3 months onwards) they eat what comes from the fields as result of the family and community efforts.

The food produced in the Andes accompany all phases of life. From the market one gets rice, oil, fruits but the staple foods comes from own production.and follows a logic of local seeds, natural inputs and own practices and wisdom.

8. SPECIAL FOOD FOR SPECIAL MOMENTS

Some social events of life require the preparation of food in a special manner.



FOOD FOR MOTHER EARTH

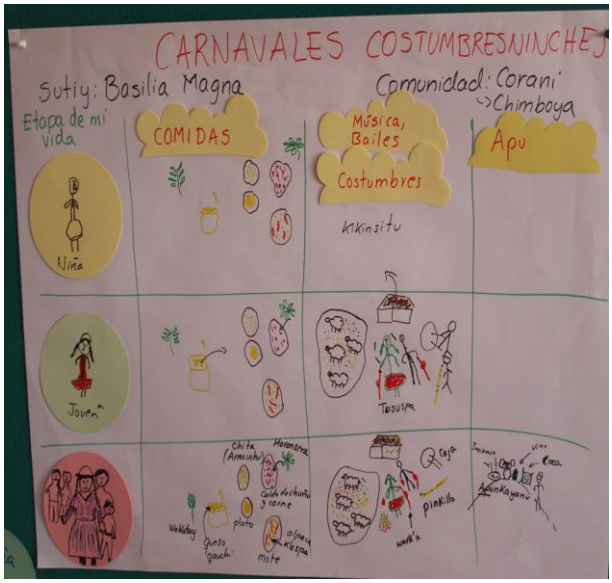
Food for mother earth is prepared in January, during the moon change of August, during Carnival, during the Sommer solstice. It is food that few persons can prepare, requires symbolic skills to combine the ingredients that will please mother earth and keep life as an ongoing cycle.

FOOD FOR PREGNANT WOMEN

Food for the pregnant women has the vision of strong and healthy girls and boys. It starts when the women is aware of her pregnancy. Mother's wishes regarding some food should always be fulfilled otherwise the child will be weak. Quinua soup, with fish and collected vegetables is important for pregnant women.

FOOD FOR CHILDREN

Children do not eat the interiors of the guinea pig, nor pork and other type of meat. It is preferable to give them quinua in different forms and also natural calcium that is contained in white soils. The cookies (Kispeñas, made of quinua), maize and broad beans are delicious snacks when they are at home, also fruits. When they go to school we send them with cheese and boiled chuño (dehydrated potatoes) to eat during breaks.



FOOD FOR CARNIVAL

Is one of the highest moments of the agricultural cycle. The plants need to be nourished with food, dances, music and prayers to the Apu (sacred mountains).

FOOD FOR THE DEAD

When a person leaves the world food continues to accompany the gradual passing to transcendental life. Food is cooked also for the members of the family and community who stay in this world.

9. WE COMMUNICATE WITH AFFECTION AND CARE

"I know about my dearest food chuño looking at the sky. The stars, the moon, the air, the temperature tell me when frost will come and I can go on to harvest and dehydrate the bitter potatoes…the potatoe plant tells me what it needs to grow"

10. THE KNOWLEDGE IS TRANSMITTED FROM THE ELDER GENERATION TO THE YOUNGER…

¨My grandmother stimulated my senses pleasing me with some food in all moments of my life and this taste is always with me"

11. WHERE DID I GET MY KNOWLEDGE?

" How do I know what I know? By listening to the sacred mountains, the rivers they are constantly talking to me"

VARIETY OF FOOD

"….these are some examples of the diversity of plants that we collect and eat. We just look, if animals eat it, then is also good for us, if our grand mother collects it, we very confidently do the same, they are delicious and don't require money…"

12. THE PHASES IN THE DIALOGUE PROCESS.

These and other insightful moments of reflection about food are some of the contents to be exchanged in encounters between farmers and scientists. Previously, there are several phases to set up as shown in the poster:

1. Community facilitators (CF) identify knowledgeable, women, men and talented youngsters that are motivated to engage in long term relationship with scientist having in mind Food Sovereignty.
2. CF call and conduct group meetings with the identified knowledgeable persons in a period of time of several weeks. These meetings are moments of action-reflection -action with the overall theme Food. CF stimulate the farmer group with help of the PAR tools (space, time, wisdom) to visualise their knowledge about food. As outcomes of these sessions the knowledgeable persons feel interconnected in terms of what they know about food and are ripe to have a sense of belonging to a Farmer Wisdom Network (WN).
3. In coordination between the CF, the WN, Community Organisers (CO) they make an agreement to set up the conditions for a Preparatory Workshop (3 days) in one community. This can be preceded by short community workshops about the selected topic, where the most knowledgeable farmers (female and male) are selected to join the Preparatory Workshop. The workshop is designed by the CF, based on action reflection action processes and they use the visual tools of PAR. The structure of the preparatory workshop are four basic questions:
    I. What do I know about Food?
    II. How do I know?
    III. How do I know what I know and
    IV. To whom I want to transmit this knowledge?

    A code of ethics as a guide for the interaction between farmers and scientist should be an outcome of the workshop agenda. The workshop should allow for the expression of each one of the participants wisdom and every step aims at gaining self confidence in the presentation of their knowledge. The Community video-makers (CV) will be informed by the facilitators of their intervention during the workshop with the task to edit a film or several short films containing relevant scenes that can be part of the Dialogue process with the scientists later on.
4. Only after the Preparatory Workshop a Farmer Scientist Dialogue (FSD) can take place. It is an agreed encounter between selected scientists and members of the WN of 2 days, following an agreed invitation of the community. The CO in coordination with the CF have arranged the visit of the scientists after several meetings with the purpose to identify scientists who are motivated to engage in a dia-

logue. The content, meaning and purpose of the Dialogue should be clarified to them and specially the commitment to engage in an equal to equal relationship with the WN, showing respect for the different views and striving for the construction of a common horizon in terms of Food Sovereignty. The CO is in charge to make sure that the transport, logistic, venue is favourable for the purposes of dialogue and to count with sufficient visualization material. It also includes a community tour to show the food treasures, a comfortable, protected space to converse friendly and show videos relevant to food sovereignty. The processes of a dialogue that focuses on wisdom are detailed below.

5. The results of the FSD are visualised by the participants. The CF should design a special chart to develop a plan of joint action between the WN, the Scientists differentiated by local and regional levels and distinguishing the actors involved in each activity. The range of activities is very broad (food, seed experiments, specific participatory action research on food crops that can lead into joint thesis of graduate students, meaning that the farmers are not the informants, but subjects of knowledge, new workshops on specific aspects of food sovereignty, seed fairs, farmers studies of research centers...) Depending of the dynamic of the dialogue, it can be possible to build alliances, for campaigning on food sovereignty, and to influence agro-food policies in the future..

THE DIALOGUE FOCUSES ON WISDOM.

Dialogue is a human encounter between persons that communicate in equal to equal terms. In this case the encounter is between farmers and scientists who each person from their different knowledge traditions think, meditate, reflect using the word in a flow of turns, they listen carefully to each other's thoughts and get engaged in the construction of something new, surprising to both, something of a quality that awakens astonishment.

When Dialogue focuses on wisdom it engages the senses, the feelings not just the intellect, especially when it deals with food. It is not an informative speech, based on impersonal data or stereotyped general and ambiguous impressions. Dialogue is always personal.

DIALOGUE HAS LEVELS, CONTENTS AND METHODS.

The CF guarantees that Dialogue has the following characteristics.

- At personal level, farmers and scientists should be able to talk face to face, and address to each other in personal way. A formal environment, like sitting in a scholarly arrangement will hinder that personal level. It is better to combine different settings for the dialogue. For a while in the fields to see touch, smell, taste food..., then in a room to screen the videos, then move to another environment to talk and enjoy the visual charts prepared during the previous farmers' meetings, for the action plan another setting might be more convenient.

  Dialogue has an inclusive level, takes into account different angles, opinions, points of views. Nobody should feel threatened or afraid of being ridiculed.

- The contents arise from the personal experiences, not from books or statistics. The contents are product of personal reflections expressed in visual means that convey the particular way of perceiving an aspect of food wisdom. Facilitators should be attentive to prevent the repetition of slogans, clichés about food that are easy to utter following mass media.

  Contents should go beyond the productive aspects of food, market prices, nutritional value ascribed by conventional science. The contents in a Dialogue are insightful when they motivate farmers and scientist to recall, to imagine, to dream, to brainstorm, to witchcraft, to let the heart speak for them.

  During the workshop the participants proposed many topics for the dialogue, but they committed to 4 issues of concern:

  A. The traditional varieties of maize in the Vilcanota Valley in Cusco, which is endangered, as modern seeds invade the communities and are promoted by the extension systems, the market and the seed producers, as the corn grows taller and is more productive in quantity, but it does not have the quality of the old varieties of many different colours. The farmers of Queromarca want to create their seed bank and maintain and augment their local traditional varieties, and coordinate with maize scientists about maize breeding and solving problems with pests and diseases.

  B. With climate change impact the so called sweet varieties of potato (solanum tuberosum) are grown now in higher altitudes (up to 4000 m) replacing the bitter potatoes (Solanum x juzepczukii). The scientists have been keen in collecting thousands of potato varieties to experiment and breed new potatoes in the laboratory, but have failed to engage with the farmers. The farmers are interested to gather the wisdom of the elders on bitter potatoes and then discuss with scientists about their knowledge about bitter potatoes engaging in an intercultural dialogue.

  C. The Andean camelides (the domesticated llama and alpaca) are suffering diseases, for which the elders had answers from natural medicine (herbs and minerals) instead of chemical medicine. The communities of Ayrumas Karumas, Macusani and Qhonqho Likiliki want to collect the wisdom of curing their animals naturally and dialogue with scientists about diseases and natural ways of curing the Andean animals.

  D. The fishermen from Perka, Vilurcuni and Sanquira suffer the decline of a local fish species called Karachi (Orestia) and wish to reproduce Karachi in their fishing grounds. They want to recover the wisdom of the elders about fish reproduction and dialogue with fish scientists, archeologists, social scientists, nutritionists about the possibilities of the reproduction of Karachi at the community level.

- In terms of methods, the facilitator should prepare open, creative questions to guide the dialogue. Each question addressed to farmers and scientists should allocate time to reflect, visualise knowledge, prepare a role play or any other means of communi-

cation that conveys genuinely worldviews without simplifying the answers in judgements like this is true or false.

Creative open questions allow the persons involved in Dialogue to immerse, explore and express themselves imaginatively. This can happen if the knowledge about food is addressed by questions that elicits answers related to personal histories, fields of practices, preferences, and memories and visions of the future. Important is therefore that the facilitator introduces questions suggesting to be elaborated in tools like historical diagram, four fields, mind maps, vision drawings from the PAR toolbox.

Whatever results from the reflection is visualised and is the content to talk about, having in mind the possibility of enriching the topic with positive contributions that yield into a better understanding of the parts involved in the dialogue.

INDICATORS OF WISDOM DIALOGUE

How can we be sure that the interaction between farmers and scientist is a dialogue and not the classical monologue. Some indicators are these:

- It is a face to face relationship, a personal exchange of views. It is not an instructive lesson nor a delivery of information or facts about food,
- It is an open process that generates surprises, creative ideas, new insights. It is not a pre fabricated result.
- It is an inclusive process from all points of view, cosmovisions, values, memories, visions, imagination. Nobody has the monopolising power to say “we only speak about facts” or “that is not the Truth”.
- It is plural in the sense that all ideas are welcome originating from the personal experiences. Nobody should try to convince the other person. Expressing and visualising ideas from a specific angle are always the point of entry to mutual understanding. If somebody feels forced to accept ideas from another that is not dialogue.
- Dialogue is a mutual enrichment, at the end every part feels a deep satisfaction to have come nearer to the ideas and experiences of the other. When this happens everyone has gained new perspectives without loosing own identities. This convergence is the basis of a common plan of action for the democratization of science: A long term friendship to transform food systems into a public good.

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Food Sovereignty and Democratization of Scientific Research in Food and Agriculture.

Throughout the world, publicly funded research shapes the choices that are available to farmers, to food workers and consumers, and the environments in which they live and work. There is an increasing need to explore ways of democratizing the governance of science and technology, ensuring that it continues to serve the public good rather than narrow economic interests.

A series of conversations with farmers, pastoralists, indigenous peoples, policy-makers and representatives of social movements between 2005-2007 has led to a major multi-country initiative, in which citizens can exercise their democratic imagination to decide on the kind of food and agricultural research they want—focusing in particular on transforming knowledge and ways of knowing for food sovereignty. This international initiative is known as: Democratising the Governance of Food Systems. Citizens Rethinking Food and Agricultural Research for the Public Good.

More specifically, the methodological approach seeks to facilitate the participatory design of alternative, farmer and citizen-led agricultural research – one which is democratic and accountable to wider society. This participatory policy process was initiated in 2008 to create safe citizen spaces in three regions, with one country acting as host for each region: West Africa (Mali), South Asia (India) and the Andean region in Latin America (Bolivia/Peru).

In each setting, this action research explicitly aims to strengthen the voices of small-scale producers and other citizens in setting agendas for scientific and technological research as well as in framing policies for food and agricultural research. The initial framing of topics for deliberation and the precise methodology used in each case study have been jointly developed with local partners and co-inquirers. However, each site-specific research process adapts and combines the following key elements to ensure a competent, fair and trustworthy deliberative process:

- The use of participatory approaches and methods to include diverse actors in deliberative processes and safe spaces, including citizens' juries, consensus conferences, citizen panels, VIPP and participatory action research, scenario workshops, deliberative polling, multicriteria mapping, visioning exercises and other culturally appropriate fora for deliberation and inclusion.
- A set of carefully-designed safeguards to ensure the quality and validity of the knowledge and actions generated. Such safeguards are needed in collaborative inquiries where the political stakes in the outcome of this way of knowing are high. Safeguards are being combined in mutually reinforcing ways to ensure that deliberative processes are broadly credible, trustworthy, fair and not captured by any interest group or perspective.
- A mechanism for linking formal decision-making bodies and processes with spaces in which expert and experiential knowledge are put under public scrutiny, by engaging relevant social actors and coalitions of interest.

for more information on the history of this project and who is involved see: http://www.iied.org/natural-resources/key-issues/food-and-agriculture/transforming-agri-food-research-for-citizen-participation-and-public-good

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