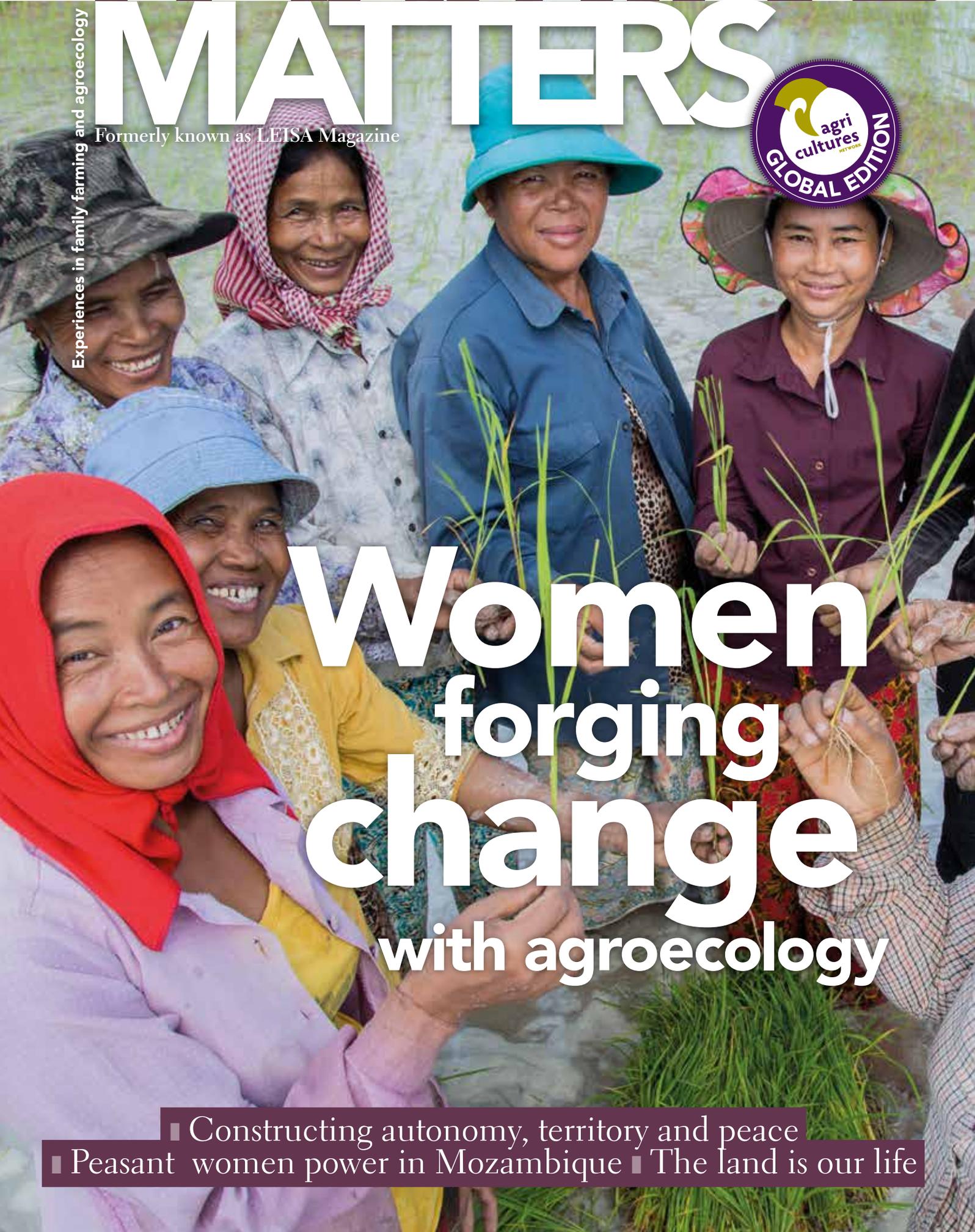


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Women forging change with agroecology

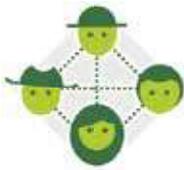
- Constructing autonomy, territory and peace
- Peasant women power in Mozambique ■ The land is our life



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The Mexican star at the US farmers' market

My name is Nelida Martinez. When I was sixteen I migrated from Oaxaca, Mexico to Washington State in the USA to pick berries. Now I am the owner and operator of my own organic farm called Pure Nelida Farms, in Skagit Valley, Washington.

We Latino farmworkers are the majority here. But it's a lot of humiliation for us. Many of us never think about having our own farm because we feel degraded by the work as farm labourers and we don't have money to rent our own land. But when my son got sick with leukemia, I really started thinking about the chemicals I worked with and how I wanted to have a healthier life for my family. I wanted to grow my own food organically and know where it was coming from. I wanted to work in a healthy environment.

So I started planting tomatoes, jalapeños, cucumbers and a little bit of everything on a small

plot of borrowed land. I was growing for my family but also selling a little at the markets. I began making some money, so I leased an acre of land to grow more. Then I learned about Viva Farms, a farm business incubator that leases organic land at half the market rate, and provides infrastructure and services. So I started growing there. Now I sell produce and berries at the Viva farm stand and at farmers' markets on Saturdays where I also sell ready-made foods.

Among my friends I am known as *La Estrella* (the star). They say I am very good at farmers' markets. I also make fresh tortillas, as they are part of the food culture I bring from Oaxaca, and sell them at the market. But, *no soy tortillera*, I'm not a tortilla maker, I'm a farmer!

Interview by **Natasha Bowens**, excerpts from her book 'The Color of Food'. Photo: **Natasha Bowens**.



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Building autonomy through agroecology

In Brazil, a strong network of female farmer-innovators has been driving fundamental change in the lives of hundreds of women in the past 20 years, overcoming the isolation of many rural women and creating a development plan for the region based on agroecology. Collective learning processes formed the basis of this change.



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Bringing 'life' back to our food system

In the Spanish city of Cordoba citizens are transforming their food system. Women are at the forefront of this movement, experimenting, innovating, networking and mobilising others. Their story reminds us that a need as basic as healthy food cannot be left in the hands of capitalist market and that by working together in solidarity autonomous food systems can be achieved.



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SRI: A practice that transforms the lives of women

With conventional rice growing practices, women perform backbreaking tasks. But the System of Rice Intensification enables farmers to work under healthier conditions while creating various other physical and social benefits, as we learn from women in India, Malaysia and Cambodia.



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Perspectives

New seed laws, land grabbing and the push for a green revolution in Africa work against women farmers. Once the principles of agroecology are firmly embedded in African policy making, women can regain their rightful position at the centre of agricultural transformation, argues Sabrina Nafisa Masinjila.

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Women showing the way with agroecology

Around the world, women forge change in their communities using agroecological approaches. Yet, surprisingly little has been written about this subject. This issue of Farming Matters shows how women can transform a situation of exclusion, crisis and social vulnerability, into a positive spiral of innovation, solidarity, and personal growth.

Edith van Walsum

Many innovations led by women are based on agroecological principles such as increasing diversity, using fewer pesticides, or building new relationships with consumers. Through small experiments women learn, get organised and strengthen their autonomy. They gain increasing recognition and visibility in their communities and increase their self-esteem. This positive spiral can culminate into much larger processes of emancipation at the regional, national or even international level.

This issue of Farming Matters, dedicated to women farmers and agricultural workers, shows a variety of experiences, each of them inspiring in their own way. Women's struggles are about much more than maximising the yield of rice, maize or beans- they are about creativity, dignity and autonomy, and the well-being of their communities.

A brief historical perspective

Long before the term 'agroecology' became popular, and much longer before the term 'climate smart agriculture' was coined, women and men farmers around the world were practicing agroecological principles. Women were not only doing most of the work in family farming, they were also highly knowledgeable and skilful in their work. Whereas men tended to have the broad overview of their farm,

women kept expert knowledge about the selection and storage of seeds; multi-cropping systems of grains, tubers, beans and vegetables; the food and medicinal value of wild plants; and the raising of small animals.

Since the 1970s, scientists, development agencies, NGOs and policymakers have been paying increasing attention to the roles of women in agriculture. But globally, female farmers still receive only 5% of all extension services while they do 75% of the work in agriculture and produce 75% of the world's food. Rural women's major stumbling block continues to be their lack of access to and control over land as we learn from an interview with four powerful women's



rights activists from Asia and Africa (page 22). According to IFAD, women only own around 2% of all titled land world wide. Increasingly, farmer access to seeds is also endangered, which is especially problematic for women. If the world is serious about addressing gender inequality, it is important that we continue to address such deeper political and cultural issues.

One family, different paths

A general assumption is that if only women knew more about new crops and technologies their productivity would increase up to 20–30 percent (FAO). The risk of this thinking is that it suggests that women only have to catch up with men to produce more. Several authors in this issue of *Farming Matters* present a different, more complex picture where women do not automatically strive to follow men's strategies, but choose their own pathway in agriculture and in life.

While men tend to invest most of their time and energy in crops for sale, women differentiate risk by mixing food crops that have different growth periods and purposes. The case of women farmers in Kenya (see box) illustrates this well. There are a continuous choices made in each farm family. We often see men strive for higher yields, more income and integration into regional or global markets, promoted by agricultural policies and regulations, education and extension. At the same time, women work towards maintaining a buffer against all sorts of risk, providing nutritious food, securing a home base for the family, a healthy family labour force and maintaining biodiversity. Many families strive to reconcile these different needs, but this does not always happen without tension and conflict.

So, rather than asking ourselves *how can women be integrated into industrial agriculture and global value chains*, we should ask women farmers what type of agriculture they want, and why.

Why women choose an agro-ecological path From the articles in this issue, various reasons emerge that explain why women choose agroecology and become drivers of change.

1. *Women's agro-eco-logic*: Agroecological practices are normally inexpensive, simple and effective; there is a minimal dependence on external inputs. The yields may be higher but can also be lower than those in conventional agriculture. What counts more for women is the total benefit they derive: enough diverse and healthy food to feed the family, a decent net income, fodder to feed the animals, and improved soil health. This becomes clear from the work of peasant women in Mozambique (page 36).



Photo: John Abioye

2. *Creativity and innovation*: Beyond just being a common sense approach to agriculture, agroecology is a more rewarding way of farming. Women emphasise that agroecological practices open space for creative change in the production system, while fostering solidarity and increasing productivity. This can be seen in the story from Malaysia (page 27). Similarly, experiences in the Himalayas (page 38) show that in harsh circumstances of climate stress and male outmigration, women use their creative skills to drive positive change through agroecological innovation.
3. *Gender logic and a body logic*: The System of Rice Intensification, a set of practices rooted in agroecological principles, benefits women (page 26) It has led to a significant reduction in drudgery and improvement in the wellbeing of women rice farmers who earlier used to stand for long hours in dirty muddy water to transplant the rice. Such benefits are rarely reported; yet, they are likely to be crucial factors explaining the spreading of SRI so far and for further spread in future. This challenges the assumption that agroecology generally increases women's workload, and that women are not interested in agroecology as a result.
4. *Living in harmony with nature*: For women, choosing the agroecological path is ultimately a choice for autonomy. Women explicitly choose to follow a pathway with nature, not against it. In Spain, women farmers point at 'life' as the central aspect of their feminist approaches to agroecology that have transformed the food system of the city (page 14). Women's proximity to nature is neither romantic nor ideological, it just is.
5. *From communities to movements*: Women fight for their autonomy, yet, at the same time they are committed to living and working in harmony with their family and the community. Agroecology brings these worlds together. Experiences in Brazil (page 10) and Colombia (page 32) show how women become drivers of peaceful agroecological change in situations of conflict.



Photo: Harushimana Teddy



Photo: Juliana Diniz

New opportunities

Policies at all levels can support women in reinforcing their agroecological strategies. Sabrina Nafisa Masinjila (page 41) identifies three key areas which we wholeheartedly support: Ensuring that women farmers remain at the centre of localised seed production systems; supporting farmer-led extensions networks; and ensuring access to land.

At the global level there are various opportunities to ensure the adoption of such policies. To name a few: the 2014 International Year of Family Farming has put the role of women in family farming firmly on the political agenda and an IYFF+10 process must ensure this translates into concrete commitments to support rural women. The International Declaration on Agroecology drafted by global social movements recognised that women provide a principal social base of agroecology. This was presented at three regional seminars

on agroecology organised by FAO in 2015 and needs to be followed up by governments in 2016. Finally, the Sustainable Development Goals, recently launched by the United Nations, explicitly state the need to transform our food systems and to invest in critical agents of change, including rural women. Now is the time to utilise these and other policy arenas to implement grassroots policy proposals based on a wealth of practical experiences with women-led agroecology.

Women keep the farm and family going in times of crisis. Women hold the future – and agroecology can help them get there.

Edith van Walsum is the director of ILEIA, the Centre for Learning on Sustainable Agriculture in Wageningen, the Netherlands.

Cash crop models disregard women's knowledge

Traditionally, in the Kenyan drylands, women were engaged in food cropping and men devoted their time to pastoralism. From the 80s onward, however, the introduction of cash cropping enticed men into agriculture. So while the men grow crops for sale, women choose to work with agroecological practices. They cultivate a range of food crops to ensure that basic food needs are covered. Women plant food crops with different growing lengths together in the same plot to protect against risks of climate variability. Women nurture soil fertility by integrating excess organic matter into the soil after weeding and harvesting, and they conserve biodiversity through careful selection and conservation of seeds. Without this, the shift of men to cash cropping would not have been possible. Land fertility would be depleted by the mono-cropping required for cash crops. In the

case of too little or too much rain, monocultures will not survive.

This example shows that commercialisation models disregard the knowledge about agricultural sustainability and resilience that is intrinsic in women's agricultural practices. By not taking their knowledge seriously, these models disregard women farmers themselves and their crucial importance for family farming and food security.

The text for this box was provided by **Martina Angela Caretta** (martina.angela.caretta@humangeo.su.se) based on work from her recent PhD thesis (Caretta, M.A. 2015. East African Hydropatriarchies: An analysis of changing waterscapes in smallholder irrigation farming. Stockholm University).

I always have to think about the etymology of the terms 'economy' and 'ecology' when I see a home garden. The home garden is a highly diversified environment within a farm where crops used in the kitchen are grown in association with others. Soils of the home gardens are often more fertile than the surrounding fields of the farm, and its structure, biological diversity, organic matter and nutrient contents have often been 'upgraded' through years of care and proper management, even in areas where soils are inherently poor. Home gardens are often the only green spot on the farm in dry years.

In most cultures, the home gardens are women's territory. They contribute enormously to food security and nutrition through the diversification of diets, producing food even outside of the growing season, and producing 'forgotten' traditional crops. Home gardens are also crucial to secure food and livelihoods for older women. In both monogamous and polygamous families of East Africa every wife owns a home garden. It is often the only thing she will inherit once her husband dies and her children move away or take over the farm. From this perspective, there is no doubt that the investment in building up soil fertility pays off in the long term.

A study done in two ethnically different villages in western Kenya by one of my former students shows how local vegetables that are often regarded as 'weeds' in agronomy are a source of vitamins and minerals for the farming families (Figueroa-Gomez, 2008). The study also revealed that women knew a lot more edible species than men. These local vegetables, some of them known exclusively by women, constitute an essential resource in times of scarcity. Through hosting a wide diversity of plant species and cultivars, home gardens are also crucial for the conservation of agrobiodiversity.

Home gardens are organised by the rules of the kitchen in order to have fresh and diverse food all year round. And here is where economy (the management of the household) and ecology (the knowledge of the household) converge. This is how female farmers from all over the world are contributing to safeguard the most important inheritance we may receive, one that is essential for agroecology, for future food and for nutritional security: cultural and biological diversity. Thanks mama!

Pablo Tittone (www.pablotittonell.net) is coordinator of the National Program on Natural Resources and Environment of INTA in Argentina and Professor of the Farming Systems Ecology group at Wageningen University and Research Centre, the Netherlands. He is a board member of the African Conservation Tillage network and member of the Latin American Scientific Society on Agroecology (SOCLA).

This was the last column of Pablo Tittone in 2015. We thank Pablo for his insightful and thought-provoking contributions throughout 2015 and we will continue to work together with Pablo in strengthening agroecology.



Safe-guarding diversity in home gardens

Building autonomy through agroecology

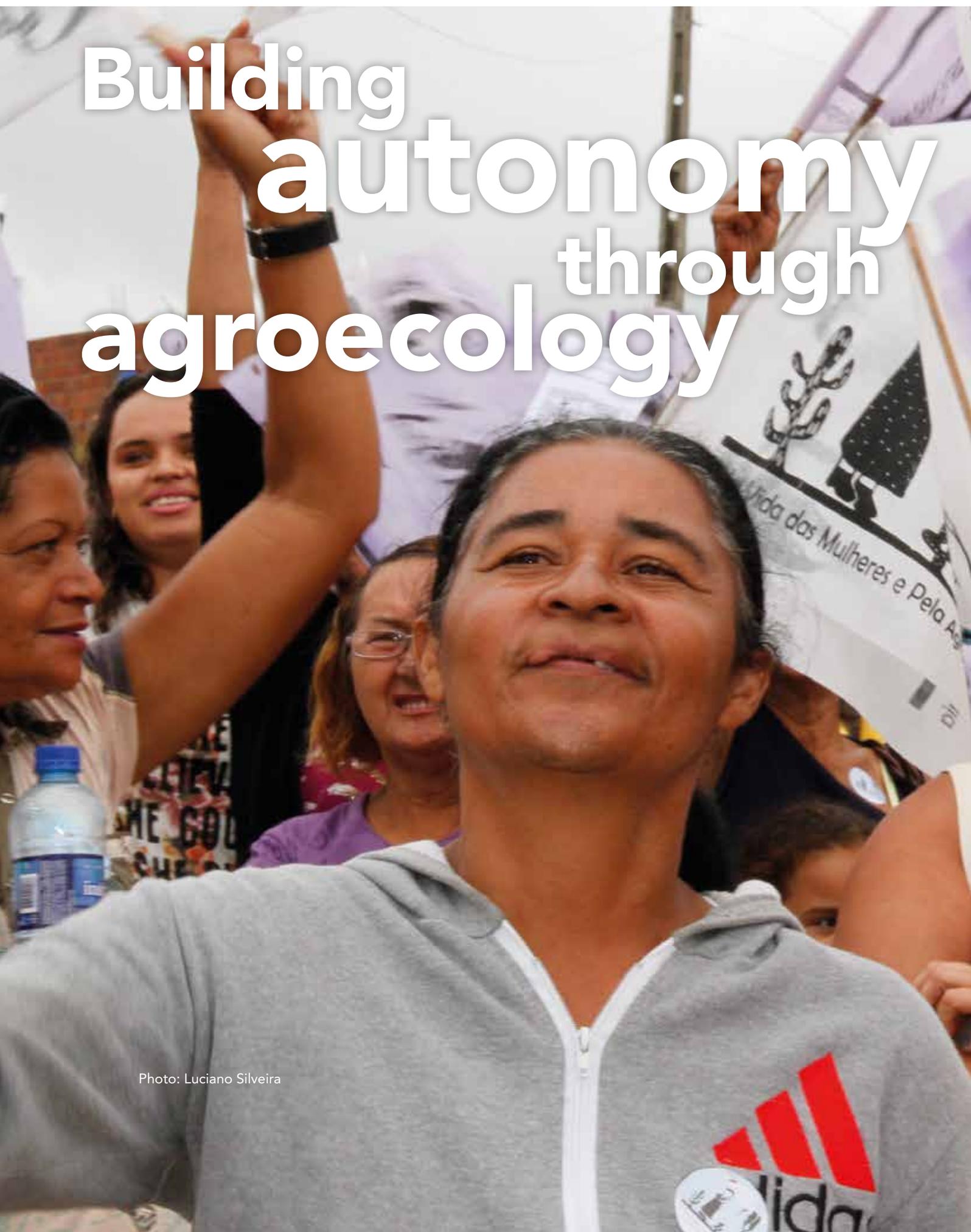


Photo: Luciano Silveira

A strong network of female farmer-innovators in Paraíba, Brazil has been driving fundamental change in the lives of hundreds of women. Collective learning among farmers has brought rural women out of their isolation and into positions of leadership. The success of the women's movement lies in its link between experimentation with agroecology and reflection on inequalities.

Adriana Galvão Freire

“I am not a slave, nor an object - I have no owner, I am not a piece of property - I want freedom to be a woman...”. These were the chants of over 5000 women smallholder farmers from the Borborema Pole farmers' union and from other regions in the state of Paraíba in Brazil as they marched through the city of Lagoa Seca in early 2015. Their songs became the marching call in the struggle for autonomy, for an end to all forms of oppression and violence against women, and in support of agroecology. Dressed in white or in lilac, with flags in hand and hats on their heads, the women took to the streets as part of the 6th *March for the Lives of Women and Agroecology*. They shared experiences and discussed different forms of violence that they experience. The march was organised by a strong network of female farmer-innovators who have been driving change in the lives of hundreds of women, and creating a development plan for the region based on agroecology.

A network of female farmer-innovators The Borborema Pole is a forum of rural workers' unions and family farming organisations covering 14 municipalities and more than 5000 families in the semi-arid Borborema region. From the early 2000s onwards, the Borborema Pole and AS-PTA, an NGO active in the region that is also a part of the AgriCultures Network, began to devise collective, local development plans based on strengthening family farming and the promotion of agroecology.

Methodological principles of building on local knowledge and collective learning among farmers lie at the heart of our work. Through these principles we have supported family farmers in developing numerous agroecological innovations to overcome technical, economic and socio-organisational barriers over the past 15 years. Despite successes, however, a patriarchal culture remained dominant both within the family

and in organisations in the region. This made women's knowledge, their practices, and their importance for the farm household invisible. Their capacities were not fully being put to use. The inequality between men and women was a barrier to the full implementation of agroecology across the region.

In 2002, the gender issue came to the fore. A group of women began reflecting on what they were doing on their farms and in their daily lives. Through this participatory appraisal the group began to work towards a collective understanding of their role in the family farm. An important realisation was that most of their activities were concentrated within the house and its immediate surroundings.

Arredor de Casa This space was coined *Arredor de Casa*, which literally translated means 'around the house' and refers to the yard, the outdoor space around and pertaining to the house. The women identified the different components of their yards, the multiple functions they have and the significance of their own knowledge and practices in relation to that space. They found that it is an important space where the women are involved in many activities: water is effectively re-used, medicinal plants preserved, and new seed varieties are tested. The crops and small livestock produced there form an important contribution to the household economy.

The women also started to identify the main challenges they faced and how they could overcome them. A major challenge they identified was land. The area of the backyard was coming under pressure. Borborema has a high concentration of family farms that are subject to land fragmentation. As families find themselves with smaller plots of farmland, the fertile and humid land surrounding the houses became attractive for men to use for their farming activities. Conflicts of interest over these areas of land resulted in an increase in the economic and social vulnerability of the women, leading to extreme situations of subordination, domestic violence and increased poverty.



Women learning from other women. Photo: Adriana Galvão Freire

To make the work of women more visible and valued, a Regional Backyard Seminar was held. Over 150 women participated and shared successful backyard practices. The Committee for Food and Health was formed that went on to organise a training programme for women farmers. A movement to revitalise and reorder the *Arredor de Casa* started to take shape.

Unearthing the knowledge of women The committee acted as a catalyst for farmer-to-farmer exchanges based on the methodological principles of collective learning of the Borborema Pole. This gave rise to a network of over 1300 women farmer-innovators. Women visited each other's farms addressing specific technical problems and offering solutions based on principles of agroecology. The Committee for Food and Health follows up with women to support them in adapting and implementing the solutions they identify for their own farms.

Making their agroecological knowledge visible and explicit motivated many women to experiment more

The women also carried out specific studies on medicinal plants, small livestock, native fruits, poverty alleviation and economic monitoring of their farms. This was key in unearthing and organising the wealth of knowledge held collectively by women. Making this visible and explicit motivated many women to experiment more.

The exchanges were also vital in overcoming the isolation that many women experienced. They could now meet and get to know each other, allowing for the gradual removal of cultural barriers which had 'tied them to the kitchen.' Through these meetings a collective identity was being forged, that of *women farmer-innovators*.

As a farmer in Remigio put it: "Today I am a different woman. Before, when I saw people I never felt like talking, being open. I just listened to them speak. Today no! Today I speak with the whole world. I became stronger, as a woman, as a mother. When I and other women started participating, something men were already doing, many things changed in my community. Especially for me. I feel fulfilled and will continue to participate!"

Two major perceptual shifts were fundamental for the consolidation of this process. The first was the recognition of the backyard as an important subsystem within a family establishment for its potential to generate wealth, food security and sovereignty and wellbeing for the family. The second was that women gained more sway in both public and private spheres as they

reclaimed control of the backyard areas and were successful with their agricultural and economic undertakings.

Rotating Solidarity Funds – a tool to self-organise The Committee for Food and Health established Community Rotating Solidarity Funds (RSFs) to support women in applying at home the ideas generated from the exchange visits with other women. The RSFs are based on the principles of reciprocal exchange and mutual support that have long existed in the practices of rural communities in the region. Now, a growing number of women farmers from over 90 communities are part of Solidarity Funds.

When women would leave the house and return with a concrete way of improving the wellbeing of the family their relationships with the other members of the household changed. Suddenly women could overcome their financial limitations and implement change. Furthermore, they learned to self-organise to overcome inequality and oppression. At times, their journey led them into conflict within the family, revealing the oppression and subordination of women of the patriarchal culture in which they live.

This gave rise to further analysis of gender inequality by the women themselves. It became clear that progress towards a political strategy for women to reclaim territory could not be achieved without understanding and challenging the inequality between men and women.

Overcoming oppression and gender inequality At the end of 2007, AS-PTA and the Borborema Pole began to look for ways to make these changes in the lives of women permanent. Three women farmers who had taken on leading roles in the promotion of agroecology shared their personal stories in the network of women farmer-innovators.

These stories opened the doors for other women to express the lack of recognition for their work, and the inequalities with respect to the use of space, time and money that they experienced, many for the first time.

Women visit other women's yards and share their experiences and their knowledge.

Photo: Adriana Galvão



Women spoke about ending violence and oppression against women and in support of agroecology.

Photo: Luciano Silveira

Through this sharing, the group of women were filled with courage to overcome subordination. Pathways to new forms of leadership emerged.

From this point forward, gender equality was mainstreamed across all aspects of the work of the Borborema Pole and AS-PTA. The stories catalysed action, not only the within the Pole, but countrywide when they were shared by the Brazilian National Articulation of Agroecology (ANA). When ANA began to promote this work, it was an important tipping point for self-organisation of women.

The struggle continues With the annual March for the Lives of Women and Agroecology, the women's movement is now more visible than ever. Participation grew from 700 women in 2010, to 1800 in 2011 and 5000 in 2015. In the beginning the majority of the women joining the March were farmer-innovators. Now participation is much broader. Events focused on how to combat the cultural barriers that uphold the inequality between the sexes precede each march.

It is clear that the success of the women's movement lies in creating a direct link between agricultural experimentation and reflections on inequalities. This generated new, accessible, and functional concepts of roles that helped both genders in family farming to flourish. One result of this work is that women now play important roles in the management of the Borborema Pole at the municipal, state and even national level, contributing decisively to the Pole's political project.

The leaders of the Pole say that "now is not the time to pack away our flags, the struggle continues every day." With the aim of resolving conflicts, relationships between men and women are gradually evolving. It is fair to say that there is still a long way to go. Nevertheless, what matters is that these women are leaving their mark on the historical struggle for social change, in the struggle for the lives of women and agroecology.

Adriana Galvão Freire (adraiana@aspta.org.br) is the Technical Advisor of AS-PTA, a Brazilian organisation that supports family farming and agroecology and a member of the AgriCultures Network.



Bringing 'life' back to our food system

By prioritising human and non-human life over economic profit, and cooperation over competition, citizens of the city of Cordoba have been able to transform their food system into a thriving network of local food producers and consumers. Women have been at the forefront of this movement.

Leticia Toledo Martin

In only a few decades, industrial agriculture in southern Spain swept away many home gardens and marginalised the cultural values of food production. This model of agriculture, focused on maximizing production, is leaving negative social changes in its wake, such as a separation of people from the source of their food and a social devaluation of the farming profession. Furthermore, the power over our productive resources is being concentrated into the hands of a few large companies.

A need as basic as that of feeding ourselves cannot be left in the hands of capitalist interests. I began to produce vegetables more than 10 years ago because I wanted to create a system to satisfy our food needs in the most autonomous way possible in order to regain power over our lives. A self-organised food system was the starting point for the local transformation that our movement brought about.

In Cordoba in 2005 there was only one place to buy organic food in the whole city. It was a small producer

WOMEN > AUTONOMOUS FOOD SYSTEMS

and consumer cooperative called Almocafre with a store open to the public. Now, in 2015 after 10 years of experimentation and collective learning we have been able to transform the city of Cordoba and its peri-urban areas into a place with heightened awareness of the importance of local production and consumption. Currently there are more than 20 small producer initiatives, multiple consumers' associations, many of them led by women, and a wide availability of organic and locally produced foods. The network that connects all these initiatives is knit by people of all ages and walks of life.

The journey of our movement

Our movement went through many phases over 10 years in which strong women with vision, clarity and creativity were the movers and shakers of change and transformation. Throughout the process they were at the forefront of experimentation, innovation and networking. Here I describe the growth of our movement from my personal experience.

A self-managed cooperative In 2005 we founded the agroecological cooperative La Acequia (in Spanish 'acequia' refers to a community-managed irrigation system). This cooperative was born from a desire to create a system of self-managed production, distribution and consumption of food. In this cooperative, consumer groups offer hours of work and a monetary contribution in exchange for weekly boxes of produce. All decisions, including what to plant, are made by consensus in assembly meetings. This required us to develop our skills in democratic decision making and learn to work in a horizontal way.

In La Acequia I was the main farmer responsible for the crops. We invested in taking care of the soil on our farm and in rehabilitating degraded plots of land at the edge of the city. We felt very strongly that if we wanted to be autonomous and create an alternative food system we must be able to manage the entire production cycle, so we began to produce our own seeds and actively seek out local varieties. These were the kind of decisions and approaches that were driven mainly by women.

La Acequia started with about 75 members and we grew to around 120. This earned us widespread recognition in Cordoba and we made our voices heard in the political spaces of the city. Growing into a ground breaking movement in southern Spain, we connected with similar groups in other parts of the country and in other countries.

The network of producers and consumers In 2009 we created a network to bring consumer groups and independent producers together from around Cordoba. In this network La

Acequia was one out of many food production initiatives. Alongside the fresh vegetables, the network could offer bread, eggs, meat, dairy products, pulses, grains, olives, wild mushrooms, medicinal and aromatic herbs, fruit, honey, nuts, olive oil, soaps, as well as prepared foods, desserts and canned goods. More than 100 people were able to obtain most of their food from the network.

The network valued building trust through direct contact between producers and consumers. One of the explicit goals of the network was to create a safe space in which new initiatives could be born. While this goal was met and new initiatives emerged, the organisation of the monthly encounters was laborious for both consumers and producers because it was based on a system of personalised orders.

Mini-markets at a social centre

The monthly pickup of the network turned into a weekly mini market on Tuesdays at the feminist agroecological social centre, La Casa Azul. La Casa Azul emerged from a sister cooperative of La Acequia called, La Rehuerta. Three women, self-defined as feminists, developed this social centre that has catalysed even more initiatives, workshops and events, sparking collective reflection and instigating new processes, meanwhile strengthening the informal

Weeding with the wheeled plow on the Raices field
2015. Photo: Aratz Moreno





Planting potatoes on an abandoned, degraded field outside of Cordoba. Photo: Miguel Escalonax

network of people committed to creating an autonomous food system.

In La Casa Azul, weekly mini markets allow producers to deliver to regular consumers through fixed orders or prepaid vouchers. With this system the consumer and the producer have a more balanced responsibility and power division. It is an arrangement based on stability and commitment of the consumer that allows for sustainable systems of production and consumption. Although three vegetable farms catered to around 280 consumers on a weekly basis, the people that we could reach still remained limited. We wanted to go a step further.

A producers association and a legal cooperative

Until now, all of our models aiming to achieve autonomy in our food system have been in the informal market. The current policy environment makes access to formal spaces difficult and expensive for a small scale farmer. Recently, I, together with two other people have simultaneously set up a legally recognised cooperative called Raices (roots) to be able to sell vegetables, fresh and canned, in the formal market. We have set up a producers' association called La Balanza (the scale) with eight other producers. This will allow us to take important steps towards reclaiming the formal market, including an online platform for selling products, stands in the municipal markets and sales to restaurants.

Life- a feminist approach

In Spain we are at a crucial point with our current political climate in which we must reflect on who holds the power of our productive resources such as land, seeds and water, and take back the control. Over 10 years in Cordoba we have confronted many challenges such as

difficulties in working in collaboratively, in gaining recognition as small projects, and in finding models that are sustainable for both producers and consumers. Each obstacle has provided an opportunity for creative change. We are committed to reclaiming the dignity of producers, to bring farming back into the eyes of society as an activity that is crucial for our survival.

We see the agroecology that we have defended and developed in Cordoba and the economic model that we have chosen is explicitly feminist. By this we mean our approach prioritises life (human and non-human) rather than economic profit. From our point of view competition has no place in our system. Instead, we cooperate and build safety nets of mutual support and solidarity. Our action is collective rather than individual. The natural environment in which we live is not estranged from our work; it is not a resource from

Competition has no place in our system. Instead, we cooperate and build safety nets of mutual support and solidarity

which we can extract endlessly.

The ultimate goal of capitalism is the accumulation of goods and it draws on 'life' as a way to get there. We are turning this around. Rather than leaving something so fundamental as our source of healthy food in the hands of capitalist interests, our ultimate goal is to bring 'life' back to the centre of our food system.

Leticia Toledo Martin (agroecologialeti@yahoo.es) has been farming in Cordoba for more than 10 years and has been an active leader in the food movement described in this article.

Preparing the tomato plants that will be used to can tomato sauce. Photo: Monica Toledo



Young Bedouin women can become key actors in their communities

I was born in a rural Bedouin community in North Sinai Governorate, Egypt. Being a woman in a Bedouin community is not easy. The customs and traditions of Bedouin people don't allow women to work outside their homes and women's education opportunities are quite limited. But despite the economic and gender difficulties that women face here I'm positive about the possibility of strengthening our leadership roles in our communities.

To actively participate in this change, I started the Youth Sinai Foundation for Development and Human Rights in 2012. We support young women in claiming their rights and becoming relevant economic and political actors. I work with them to increase their participation within the community. We raise awareness around the legal rights for women who undertake agricultural activities and help them in completing all the required administrative papers and documents.

Through our foundation, women also raise their skill in non-traditional agricultural activities, including cultivation of olives and methods of processing and packaging medicinal and aromatic plants. As we have extended our work to the coast of the Mediterranean Sea and Lake Bardawil, we also started working on the integration of women in fisheries. They are now participating in fishing sector networks and are learning about methods of peeling, packaging and marketing of shrimps. In addition, the young women we work with are improving their already great skill in needlework and handmade products. I've realised that for many women in the Sinai region this is a very good way to make a living, as it allows them to work from home and they are able to produce very good quality and sophisticated materials.



Photo: YPARD

Yasmina Atta (far right) is founder of the Youth Sinai Foundation for Development and Human Rights and the Youth Sinai Development Company.
Email: yasmina_ata@yahoo.com

As young Bedouin women are engaged in these activities, they become aware of the important role they play in society. We encourage them to take part in political decision making and show them the benefits for society when they are active in their communities. I am proud to work with these young women and I can see we are already becoming stronger. My hope for the future is that Bedouin women will participate in all walks of life, especially in politics.

The faces at the frontline

Working with principles of agroecology, women around the world are pioneering new practices in food and farming. *Farming Matters* proudly presents Esther, Ann, Allu, Lilian, Elizabeth, Mariama and Esther.

"Agroecology is a way to produce food that is culturally acceptable"

Esther Malya, farmer and livestock keeper in Tanzania

"I am a farmer, a leader, a trainer, and a mother. I have a piece of land of about 2,5 acres where I grow food and raise animals.

I am part of the board of MVIWATA, a national umbrella organisation that unites smallholder farmers across Tanzania. Within MVIWATA, women come together to discuss problems related to our patriarchal society, women empowerment, health, family, and farming. We also promote agroecology as a way to use available resources in our environment to produce food that is culturally acceptable. Agroecology prevents us from becoming dependent on big companies that sell poisonous

fertilizers and chemicals. We have savings and lending mechanisms that are a huge support for women farmers as this enables us to send our daughters to school.

The biggest challenge we face now is the limited awareness of ecological practices and lack of land for smallholders. We are very much against the current push for hybrids and GMOs and the dependence that comes with them. Thus we call upon our government to declare Tanzania free of such technologies and we encourage farmers to use indigenous seeds and farmers' landraces that are readily available, reliable and affordable. As we are so well organised, the government is now listening to us more than ever before."



Photo: Esther Malya

Interview: Sarah Hobson

“Many young mothers are looking for an alternative”

Ann Doherty, urban farmer in the Netherlands

“I grow vegetables, fruit, herbs and edible flowers in the city. I am also a beekeeper, a worm composter and a seed saver. I work within a collective of mostly women based in Amsterdam and Berlin. We teach a variety of different techniques promoting urban biodiversity, wild plants, and companion planting to school children and others in different city gardens. We also try to build the movement by connecting various urban food initiatives in Amsterdam, for example by offering ‘urban farming bike tours’.

Women form the majority in all of the community gardens we work in. They sustain the gardens, organise the work days, and do the fundraising and re-

porting. Young women are at the forefront of these activities. I have observed that many young mothers are looking for an alternative to the corporate-driven agriculture model that produces unhealthy food. I

myself also started getting more interested in food sovereignty when I first became pregnant.

Agroecology offers that alternative, and it is a great system for urban agriculture due to its flexibility, the focus on observation of natural cycles, the use of polyculture, and the promotion of biodiversity. What is key is that agroecology helps us women to grow healthy and delicious food to nourish ourselves and our families.”



Photo: Het Groene Leven Lab

Interview: Janneke Bruil

“Agroecology helps me realise my dream”

Allu Narayanamma, rice and vegetable producer in Andhra Pradesh, India

“My family owns 3 acres which we use for rain-fed cultivation of rice and vegetables. Half of this was formerly abandoned wasteland. I decided to develop this wasteland into cultivable land by improving the health of the soil through agroecological practices I learnt at the farmers’ association in our village, Yugandhar. This land now provides pulses and other food grains for my family, and we are also able to sell some of our harvest at the market. I also started to practice roof top gardening which provides vegetables for my family. Before we used to eat only the brinjal and beans that were available in the village, but now we consume 10 types of vegetables.

I got elected as a member of the executive committee of the farmer association in our village, and I took

up the lead role in sensitising and influencing fellow women farmers about the use of agroecological practices such as applying neem extract, pond silt and farmyard manure. These practices enhance the health of our soils and help keep diseases away. My paddy nursery now even survives dry spells.

As we use less chemical pesticides and fertilizers, we reduce the costs of all our farming activities. As a result, our income has increased twenty times in two years—from about eight hundred rupees in 2013 to about sixteen thousand rupees in 2015. My family members and I were able to leave our jobs as wage labourers and dedicate ourselves entirely to farming on our own land. Agroecology helps me realise my dream of supporting my family and my community and providing quality education to my daughters.”



Photo: Ranchitha Kumaran

Interview: Siva Krishna Babu and Ranchitha Kumaran

“Agroecological fairs make us more independent”

Lilian Rocío Quingaluisa, mountain farmer in Ecuador

“When I was 22, I formed a group of 46 women in Unalagua. We joined groups in other communities and formed the women’s organisation now called FEMICAN, which operates across the Cotopaxi province.

We struggle to have water and good seeds, and to obtain a good price for our crops. So we are working together to diversify our crops, which not only increases our income but help us to maintain the fertility of our soil. Now, we produce zucchini, lettuce, *puerro* onion, and traditional crops such as white carrots, quinoa and *chaucha* potato. We practice crop rotation, companion cropping and seed selection. Agroecology

for us is about producing with Mother Earth, with the knowledge of our ancestors, and with as few chemicals as possible.

Together with others we created agroecological fairs to promote direct encounters between producers and consumers, enhance local economies and

support the consumption of local healthy food. Engaging directly with urban citizens is great for us as women farmers. It means we have a better income, we do not have to work on other people’s land, we are more independent and we can spend more time with our families and animals. In our community 80% of the leadership positions are now occupied by women.”



Photo: EkoRural

Interview: Guadalupe Padilla and Sonia Zambrano

“With Ankole cows I can produce what is suitable for me”

Elizabeth Katushabe, cattle breeder in Uganda

“I breed traditional Ankole Longhorns, a strong cow that is adapted to my country’s harsh environment and resistant to tropical diseases without antibiotics, unlike the Holstein Frisian cows that are popular here. Traditionally Bahima women did not own cattle or land but today, some women do. Men milk the cows, graze and water them. Women collect the milk and decide how much each family member can drink. We churn the milk to make ghee. We know the names of all milking cows, we can tell an unhealthy cow apart, we take care of the calves, clean their sheds, and cut grass for the newborn.

My approach to cattle breeding with Ankole Longhorns is a form of agroecology, it allows me to rear my cattle in the savanna grasslands of Uganda with all its biodiversity. My cattle live in a herd as a family, they mate naturally, and my calves suckle their mothers.

As a woman, this is a good life. I can manage my livestock easily because of the calm temperament of Ankole. With Ankole cows I do not have to specialise in either milk or meat but I can produce what is most suitable for me and my community. And I hope others will respect my livestock keepers’ rights and appreciate my role and contribution to the economy and food security.”



Photo: PENHA

Interview: Janneke Bruil

"We are the solution"

Mariama Sonko, farmer in Senegal

"As women farmers, we reject agriculture that pollutes with chemicals, pesticides, and GMOs. This is a difficult struggle because we have few resources to fight against multinational corporations. *We Are the Solution* is a campaign led by rural women like myself from Senegal, Burkina Faso, Mali, Ghana and Guinea. Our vision is to promote ancestral knowledge and put pressure on our government to take seriously the preservation of our peasant agriculture.

Agroecology protects all living things and treats nature as sacred. Women are the ones who save the seeds – the soul of the peasant population. Our seeds are

ancient, and each is tied to a certain place. The traditional practice of seed selection preserves the environment and sustains biodiversity, while using our resources which are affordable and accessible. To achieve this we also are campaigning for women to have land ownership and we talk to men about why this is important.

In Senegal, *We Are the Solution* has established a platform of 100 grassroots associations. We now have a model farm field and a store where we sell our family farm products. The women in our movement are promoting agroecology and food sovereignty as the only viable system for healthy lives and a protected environment."



Photo: Fahamu

Interview: Simone Adler and Beverly Bell

"Eco-friendly and grown by women"

Esther Villca, vegetable farmer in Bolivia

"I live in a rural community called Santa Rosa. I participate in the initiative ECOMUJER (Ecowoman). Established by the Women's Farmers' Organisation of Cochabamba, ECOMUJER is a label we give to our organic products to tell customers that our products are eco-friendly and grown by women.

I migrated from another part of Bolivia and I did not know how to produce. I started cultivating vegetables to feed my family and I sold the

surpluses and I learnt about vegetable production, seed management, and organic fertilizers. Currently 30% is for our family consumption, and I commercialise the remaining 70% through Ecomujer.

Besides the economic benefits, I value this type of agriculture because it is good for our health. I am persuading my neighbours to produce in the same way and I am also pressuring the authorities of our municipality so that they will provide us with support."



Photo: CIOEC-Cochabamba

Interview: Alexandra Flores



The land is our life

Photo: Arunchandra Bose

In this interview we asked four rural women leaders and activists from Asia and Africa about women in agroecology. What we found were stories about race, caste, patriarchal systems, land grabbing, statelessness and, as an overriding theme, the lack of land ownership for women. These women are part of a larger coalition working to build rural women's leadership. They believe that women organising amongst themselves to gain leadership skills and confidence is the first step to improving their livelihoods and fighting for their rights to land- so fundamental to agroecology.

Interview: Jessica Milgroom

Why is agroecology especially important for women? *Saro:* Women in Asia are, in most cases, the farmers. But more than that, they are concerned about the nutrition of their families. There are actually more women interested in the models of agriculture that support diversity and nutrition. There are many cases of women who are fighting for land, particularly farmers. Once they get the land, they move to agroecology. So that's why land struggles are central in our agroecology movements in for example the Philippines and India.

How do women's struggles for land relate to agroecology?

Saro: Getting land is really the priority for peasant women's movements right now. We have a campaign called 'No land, No Life'. In the last few decades women have organised themselves to call for land titles in their name, or joint titles in both their and their partners' names. Often it is easier for the women to control the production on the ground when the land belongs to them. Once they get the land, they want to make use of it in the most profitable way. Experience shows that if they go back to the industrial agriculture they actually can't survive—the costs of the inputs are too high. So they choose agroecology. As they realise that they cannot do this type of agriculture alone, they have also moved towards collective ownership and collective farming.

What is the situation of female plantation workers?

Loges: Tamil plantation workers in Sri Lanka are among the most oppressed groups in the world. Under British rule there was a big caste problem. Tamil people were slaves in Sri Lanka, because Sri Lankan people didn't want to work as labourers. Until as recent as 2004, Tamil people were stateless; they had no rights to own land. Women workers do most of the tea plucking on

the plantations and they are get a very small wage. But when they have their own land, they can cultivate whatever vegetables they choose and maybe sell them. They need to work hard on their plot for a little bit of money. But it strengthens them. It means they have some money to do something, to educate their children, for example. Only when women have land do they gain leverage in their struggles for other rights; it provides some kind of empowerment. Having land also means they can save their children from pesticides, because the pesticide levels are high in the tea plantations. So the right to land is connected to the right to life.

What is the attitude of your government?

Gracie: Let me tell you a recent story from the Dalit women in India, another very marginalised group. We have been fighting with the government for 6 or 7 years, continuously struggling to get land titles. After the women finally got the land, the agricultural development officer gave them false titles. A government officer told them: "If you want the real titles, I want one of your woman for sex". But our women, together, told him: "Okay, come to our village and we will give you one woman." When the officer came to their village, very interested, he chose one woman. He went inside a room to wait for her, and closed the door. All the women together took their brooms and went in and beat the officer. He was so surprised that he ran away yelling: "Please, sorry, don't beat me, I am very sorry, if you let me get away I will give you the real titles!" And after only two or three days he gave them the true titles. This was great. But the land they got was very hilly, full of stones and difficult to work. The women decided that by working together they got land, so by working together they would also clear it. Now they are cultivating the land together, using agroecology, making compost and earning some money.

Gracie Valliamal - India

Gracie is the State Coordinator of the Tamil Nadu Dalit Women's Movement (TNDWM), which focuses on land rights and collective farming for Dalit women. She has 10 years of experience in organising and strengthening the leadership and movement of Dalit women.



Ndeye Maimouna Diene - Senegal

Maimouna is the Programme Officer of Pesticide Action Network (PAN) Africa. She coordinates the 'Women in Agriculture' programme in West Africa. She has also done national and international lobbying on rural women's rights in Senegal.





Many women have moved towards collective ownership and collective farming. Photo: PAN AP

What actions can support women in agroecology?

Maimouna: We need to strengthen the women's movement. In Senegal, for example, we have only one network of female farmers. Our challenge is now to make alliances and expand this network across Senegal and to other countries in region. We need to do more advocacy work with our local government and authorities for women farmers to have access to land. We must help women who do have land to learn about other ways to manage pests. Pesticides are so harmful to women, their children and their land, and agroecology offers them a way out of this devastating cycle.

Saro: We need to have more campaigns, more documentation of successes and struggles. We need more people to support the assertion of our rights over land; to know that this is very important. This is our life. Without land we don't have production, we don't have a livelihood. We need land to survive and to use our skills in agroecological production.

Has the situation improved for women in Asia and Africa over the last 10 years?

Saro: A lot more organising is taking place among women. They know the land is their life and if they lose that, they lose everything. A lot of local groups have made it a point to

raise awareness and work on capacity building, and women are more open to the idea of fighting for their rights. The communities that are now threatened by land grabbing, for example, saw how other communities lost their land due to the expansion of oil plantations in the 80s and 90s. So they say "okay we need to organise ourselves" and they ask civil society organisations and community based organisations to support them.

Gracie: Before, only men were recognised as farmers in the communities, but now women are also seen as farmers. Before, the government did not allow women farmers to have land. But now they are working with officials to get land titles in their names and to register their land for agriculture cooperatives. That is a very big improvement.

Maimouna: Ten years ago in Senegal we didn't have rural women represented in parliament and other councils. But now a women farmer leader was selected to be on the national economic and environmental council. She is the president of a national network of rural farmers and that is a real change for rural women in Senegal.

Loges: In Sri Lanka 10 years ago, they did not talk about plantation issues in national platforms, much less about women. Now they are, and as organised groups we speak about our problems in many platforms. This means others recognise us and our issues. We work with farmers and simultaneously, we work with the political parties. The truth is: wherever the space, as women we need to go and fight for our rights.



Sarojeni V. Rengam - Malaysia

Saro is the Executive Director of PAN Asia and the Pacific (PANAP), a NGO committed to empowering rural people to reduce the hazards of pesticides and the promotion of biodiversity based ecological agriculture. She is also a Steering committee member of the Asian Rural Women's Coalition (ARWC), a coalition of rural grassroots organisations.



Ponniyah Logeswary – Sri Lanka

Loges is the Program Coordinator of the Human Development Organization (HDO), Secretary General of the Women Solidarity Front (WSF) and a member of the steering committees of the Asian Rural Women Coalition (ARWC) and the national platform 'Mothers and Daughters Lanka' (MDL). She is an activist for the rights of plantation women workers and Internally Displaced People.



All over the world women play a unique and vital role in fixing our broken food system. The prevailing view on agriculture and food in Europe and in European institutions is limited to economics and trade. In these places (old) men in suits discuss amongst themselves and take decisions. In social movements working for the environment, development, health, agroecology and food sovereignty, women of all ages are active in various roles in equal in numbers to men, or even as a majority. Women work in urban gardens, sell at farmers' markets, do catering, process food, they are active in debates and are often leaders in these social movements.

These women make change on a daily basis. They need to be heard and taken seriously. Food is not about short term economics and power plays. Food is about health, environment, fair development, about daily life and future generations.

European agricultural policies are now designed for big industrial farms. Women hardly benefit from this because they often have smaller and multifunctional farms. Policies should not be about the production of single crops per hectare. Current European hygiene rules make it impossible for women to sell processed food, because this regulation is designed for big industrial food processing and catering. Farmers have developed and used production and processing techniques and have been doing their own plant breeding for generations. Policies and research should support further development and use of this knowledge and include female food producers in policy making. For example, public institutions could procure products locally for example schools, hospitals, municipality offices. This would give local women involved in food production a major boost.

There is a strong need in Europe to strengthen women farmers in their work, through education and training and through more supportive policies. Women farmers need access to markets, and access to land, and they need to be able to exchange seeds freely so they can have equal chances and their own, independent role in society. This way they can reclaim their historical space in food production and play a major role in ensuring adequate and nutritious food for everyone, while taking care of our future.

Hanny van Geel (Hanny@eurovia.org) represents the Dutch Arable Farmers' Union (NAV) and is also a board member of the European Coordination of La Via Campesina.



Women farmers in Europe

SRI cultivates well-being for women

It is said that 'rice is grown on women's backs'. Globally, around a billion people cultivate rice, of which 50 to 90 percent are women. With conventional practices, they perform backbreaking tasks like seedling removal, transplanting and weeding in bent posture and under wet conditions for more than 1000 hours per hectare. In addition, they are exposed to chemicals. But the System of Rice Intensification (SRI) enables farmers to work under healthier conditions while creating various other physical and social benefits. The consequences are significant, as we learn from women in India, Malaysia and Cambodia.

Sabarmatee Tiki , LIM Liang Chun and Oeurm Savann

Bodies matter - India Women from small and marginal farming families doing SRI have been making the news in India for their adoption of a new approach that challenges the age-old beliefs and practices of rice farming. However, rarely one comes across mention of the impact of SRI on their wellbeing and their bodies.

While doing research in Odisha, India during 2011-2012 women from 20 villages narrated their positive experiences with SRI. They reported a reduction in drudgery and pain, fewer infections in their hands and legs, and having more time to cook and eat properly, rest or to do other work. Major reasons for these changes were a reduction in hours and amount of work, change in their working environment, more upright posture due to use of a weeder, and men's participation in tasks like weeding. More specific information was gathered in three villages namely Rajnapalli of Ganjam district, Gunjigaon of Kandhamal district and Kokariguda of Koraput district. Women

shared the drudgery and pain experiences explicitly during the participatory exercises of a Rapid Comparative Pain Assessment (RaCoPA) entailing group discussions, interviews and informal interactions.

Groups of women ricefield workers discussed the tasks they perform under different rice-growing methods. They talked about which task hurts how much and showed this on a large drawing of a woman. At the end, a comparative picture was generated to see

With SRI, women spend less time in stressful postures carrying out repetitive movements.

differences in physical experiences of drudgery and pain. Interestingly, they all mentioned that these aspects never emerged in earlier discussions.

RaCoPA exercises revealed that with SRI practices, there is significant reduction in drudgery and pain in back, legs and hands. With SRI practices women spend less time in stressful postures carrying out repetitive movements and they handle lighter materials compared to standard cultivation practices (see box on page 28).

SRI fundamentally changes the conditions under which women have to work. Conventionally, women working in bent or sitting postures in flooded fields for long hours, come into contact with various disease causing vectors exposing them to multiple health risks like intestinal to skin diseases and female urinary and genital ailments. This affects their ability to work and earn money, and furthermore drains out their money on health care, sometimes making them indebted, as found in research by Vent and others in 2015. With SRI practices, rice fields are no longer kept continuously flooded, thus reducing women's prolonged exposure to these water-borne disease vectors. Furthermore where organic SRI is being practiced, women do not face problems from chemical fertilizers and pesticides.

As women are the producers of our food, we cannot afford to ignore their wellbeing. When they thrive, our agriculture thrives and vice versa. The eco-logic of SRI has a body and gender-logic too which needs to be paid attention to and invested in if we are seriously concerned about our toiling women.

Creativity and solidarity - Malaysia Modern agricultural modes of production do not encourage farmers to be inquisitive and exacerbate the power imbalances in our food systems. On the contrary, agroecological practices like SRI promote farmers' creativity as it encourages them to move away from linear thinking and start viewing their



A woman transporting SRI rice seedlings to the field (India). Photo: Sabarmatee Tiki

farms as ecosystems that require thoughtful management. A paddy field is no longer a factory that produces rice, but an ecosystem that houses microbes, insects, birds, flowers, trees, and farmers. In most cases of SRI, farmers experiment with the general principles of SRI and make their own judgments and adaptations, rather than just follow instructions. With agroecology, being creative is as much a means as it is an outcome, and most farmers feel compelled to constantly invent and reinvent. SRI is a practice that allows farmers to use their creativity and be resourceful.

The System of Rice Intensification (SRI)

SRI is an agroecology-based method for growing rice that enables farmers to achieve higher yields with less water, seed, and agrochemicals, and generally less labour (see *Farming Matters*, 29.1, 2013). Its major practices include planting of younger seedlings at wider spacing, frequent weeding, preferably mechanically, maintaining a non-flooded, moist field condition and managing soil health organically. This innovative system of rice cultivation achieves an average of 20-

50% higher yields than standard cultivation practices. This increase in production fosters food security, improves nutrition and boosts incomes. Thousands of farmers around the world are now using principles of SRI also with other crops such as wheat, maize, millet, sorghum, vegetables and tubers. With SRI gaining popularity around the world, benefits for women are becoming more noticeable.



Women working with the weeders in the rice paddy (Malaysia). Photo: LIM Liang Chun

Salwati Mohd. Ariffin, a Kelantanese paddy farmer, left her desk job five years ago to take up farming as a profession. As a mother to five daughters, she is determined to rid the land of unnecessary chemicals because she wants to leave her children with a cleaner and safer environment to grow up in. She also wishes to free smallholders like herself from having to purchase and use expensive inputs as they are “polluting and degrading the rural landscape that has such beauty and bounty when managed with respect for nature”.

Once Salwati gained knowledge of SRI, she began producing organic rice on her own. She prepared the land and set up her nursery, then developed an outdoor composting workshop right next to her plots. Eight cropping seasons later, she is making impressive gains, and her yields are now estimated at 10 metric tons per hectare by researchers from UPM (Universiti

Putra Malaysia). The increase in yield isn’t the most important outcome for her; it’s the long-term investment in sustainable rice production that she is committed to. She realises this is a paradigm shift and is working to instill confidence and pride in paddy farmers around her by helping them to understand the principles of SRI and to apply them in accordance to their social, cultural and environmental circumstances.

In 2014, Salwati, in cooperation with SRI-Mas, the Malaysian Agroecology Society for Sustainable Resource Intensification, facilitated the establishment of *Kumpulan Organik Kelantan* (Organic Group of Kelantan). Maintaining a horizontal structure, K.O.K members stay in touch with each other through WhatsApp by sharing best practices and exchanging questions and answers. This revives a sense of solidarity among farmers.

SRI practices that reduce labour and drudgery for women

- **Planting of single seedlings at wider spacing.** This implies fewer seeds, which requires less work, less manure and ultimately reduction of the total workload.
- **Careful removal of younger seedlings from the nursery and planting them as quickly as possible to avoid transplanting shock.** This implies that the nursery should be made in a place inside or near to the main field, which reduces the walking distance.
- **Transplanting fewer seedlings in total.** This means workers do not have to remain inside the mud or water in bent posture for longer hours.
- **Use of the weeder.** This enables women to move from a permanently bent position to an upright position. Hours spent on supplementary manual weeding are reduced.

To overcome the occasional shortage of human power, farmers can also ask for help by using WhatsApp, reinforcing the local tradition of *gotong-royong*. For example, at harvest time, Salwati and her network of farmers gather to help each other, and they study the yield components together, to see where further improvements could be made. With the help of academics, farmers who practice SRI gain better insight into their farming practices and outcomes, which in turn allows them to sell their products with more confidence.

Changing gender roles - Cambodia Under the hot midday sun in the middle of a rice paddy, 57-year old farmer Tea Sarim was enlightening ten other women farmers from her village of Deim Pour in Champey community, in Kampot province. Holding a bunch of rice seedlings in one hand and lifting a single seedling with the other, Sarim began a question-and-answer session on the issues and concerns in the agricultural sector that these farmers currently face. The smiles on the women farmers' faces expressed their interest in learning SRI techniques, having heard about how these can raise yields while also lightening their workloads.

Sarim was selected to participate in the Center Farmer for Participatory Action Research (CFPR) as part of a regional project covering four countries in the Lower Mekong River region. She became a farmer trainer, locally called a *Krou Kasekor*, to share knowledge of SRI with other farmers with her community.

With the conventional farming practices, Sarim could only produce enough to feed herself, her four children, and her parents for ten months of the year. There was nothing left to sell. Within three years of practicing SRI, she has been able to produce enough to feed her family all year around and still have some extra rice to sell. Sarim estimates that SRI helps her to reduce her workload by about 20% during the farming season: "With conventional farming, we have to spend a lot of time and energy, but with SRI farming, we use our brain."

Sarim has become a popular SRI trainer in her village. She helps women farmers in neighbouring villages move from poverty to prosperity. She enjoys sharing the new knowledge and skills that she has gained from her three-year experience with SRI. Most of the women whom she has coached on SRI farming techniques face many problems, such as domestic violence. Sarim observes, "Women are easily blamed by their husbands for the problems of the family." But with SRI, women's positions are improving, Sarim has noted. They are not treated the same as before because now they are being recognised as 'smart' and have become leaders.

The key for this change is that women are quick learners. They absorb the SRI ideas faster than men because they pay careful attention and easily grasp the concepts, Sarim finds. Men do not always want to learn because they prefer continue farming the same way that their parents taught them; "they think that they already know how to farm." But, even though men sometimes find it hard to come and listen to women's stories, "a woman has the power to lead her husband into practicing SRI" says Sarim, laughing.

In the past, there was a saying, 'Women cannot turn the kitchen around.' Sarim, however, tells the women farmers: "I am different because I have made myself different. I can turn the kitchen around, and I want other women to succeed too."

Sabarmatee Tiki (sabarmatee@gmail.com) works with Sambhav, a grassroots-level NGO focusing on environmental and gender issues in Odisha, India, and is pursuing her PhD at Wageningen University, The Netherlands.

LIM Liang Chun (liangchun.lim@sciencespo.fr) works with the Malaysian Agroecology Society for Sustainable Resource Intensification (SRI-Mas) and is currently a Masters student of International Development at Sciences Po Paris.

Oeurm Savann (soeurm@OxfamAmerica.org) is the Regional communication officer for Oxfam United States in Cambodia.

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Tea Sarim enlightens other women farmers about the practices of SRI (Cambodia).

Photo: Savann Oeurm



Faced with many challenges, women find creative solutions to improve their lives through agroecology. The experiences here highlight initiatives in which women have successfully organised themselves to strengthen their food systems, their livelihoods and their autonomy.

Nepal

Increasing food sovereignty and farmers' income

Women from Suklagandaki municipality in Tanahun, Nepal, used to buy vegetables from distant markets. Since the foundation of the Shree Khairenitar Women Development and Multipurpose Cooperative in 2003, many women have started to grow their own food. Having met first at festivals

and cultural meetings, 50 women initiated this organisation that currently brings together 1550 female farmers. They use agroecological practices such as Integrated Pest Management. Mrs. Mangali Rana, president of the cooperative says: "These new agricultural practices result in

stronger plants and a healthier soil. Furthermore, they lower production costs and increase our profit." The cooperative engages in a diverse set of activities such as a reforestation program with tree plantations for fodder and the growing of bamboo for soil conservation. They learn and experiment with agrobiodiversity conservation, as well as climate change adaptation and mitigation. Furthermore, the cooperative produces maize seeds on six hectares of land, making the district self sufficient in maize seed. Improving livelihoods and supporting environmental conservation has not only an economic, technical and environmental side, but also an indispensable social side. Mrs. Rana says that: "learning with neighbours, food and seed exchange between farmers, and working 'all for all' are the most important principles in our work that also influence others".

Contact: Binod Ghimire (binodghim@gmail.com) and Sujeeta Sharma (sujitasharma2013@gmail.com)



Photo: Dharmaraj Bagale

Tanzania

Female-friendly beekeeping

In Bermi village on the edge of Nou Forest in Tanzania, beekeeping was regarded as a man's job. Traditionally, beehives were placed high up in the forest canopy and it was considered unacceptable for women to climb the trees to gather honey. Farm Africa recognised the specific needs of women in their communities and introduced beehives that can be kept on the ground. This enabled women to develop beekeeping businesses that were both female-friendly and forest-friendly. Since then, beekeeping has become an important source of income for women in the village. By identifying cultural and practical

barriers that exclude women from accessing certain resources and creating alternative arrangements to overcome them, space previously exclusively occupied by men was opened for women through innovative approaches.

Contact: Stephanie Schafrath (stephs@farmafrica.org) and Claire Allan (www.farmafrica.org)



Photo: Farm Africa

Ecuador

Looking after life

The Agroecological Network of Loja in the Andean region of Ecuador (RAL) is a novel institutional arrangement between farmers' organisations, created in 2006. RAL brings together 17 producer organisations primarily comprised of women farmers. RAL uses a Participatory Guarantee System (PGS) as a tool of social control

of the activities of the agri-food system. Participating farmers collectively discussed, approved and validated the rules of their PGS. The compliance with PGS is an obligation for producers who participate in the weekly agroecological fairs of Loja. These markets have helped women achieve economic independence as they receive fair prices for their products, which are recognised by their customers as healthier and tastier than conventional products. For the women from RAL, the sale of agroecological food and the direct interaction with the customers improves their quality of life. One woman remarked: "They do more than give me cents and I do more than give them a vegetable". The women feel empowered self esteem as reflected in this comment by another farmer: "Agroecological production means to build a new way of looking after life".

Contact: Virginia Vallejo-Rojas (virginia.beatriz.vallejo@upc.edu), **Federica Ravera** (federica.ravera@uam.es) and **Marta G. Rivera-Ferre** (martagadalupe.rivera@uvic.cat)



Photo: Virginia Vallejo-Rojas

Congo

Valuing women's role in cacao production

Femmes de Virunga 55% is an organic, dark milk chocolate bar produced and sold to support the empowerment of women producers in Congo and help preserve the rainforest. In Virunga National Park, Congo, women producers run nurseries where they have already trained over a hundred other women in cacao growing, sharing knowledge on cultivation and processing. This process valorises women's role in the broader cocoa community, increases their self esteem and creates sustainable livelihoods. This is particularly relevant as women are marginalised in Eastern Congo: ownership of land is rare among women, girls are the first to drop out of school and women are the first victims of political unrest. The trainings are supported by the Original Beans company, who also buys their produce and plants a tree for each chocolate bar sold.

Contact: Lena Unbehauen (lena@originalbeans.com)



Photo: Original Beans



Photo: Jan de Jong

Constructing autonomy, territory and peace

In the decades-long conflict in Colombia, agroecology has emerged as a strategy that helps women to cope with the war and to feed their families. AMOY, a women farmers organisation, not only promotes agroecological activities, but also supports women to counteract the cruelty of war by providing a space to express fear and sadness, to find refuge, and to protect themselves from armed groups.

Sonia Irene Cárdenas Solís

In the past 50 years, around 5,2 million Colombian farmers have been displaced from their lands, and about 8 million hectares of farmland were taken from their owners due to Colombia's internal armed conflict. The war and neoliberal policies caused suffering, especially for women farmers. In order to overcome this situation, many women started to participate in agroecological processes, improving their agroecosystems, and at the same time fighting for social and environmental

justice. A good example is the experience of AMOY, the Association of Organised Women from the town of Yolombó in the Antioquia department. These women show that agroecology can contribute to the transformation of power relations that were formerly used to subordinate them.

The members of AMOY gathered for the first time in 1994, some years before the escalation of the armed conflict. They discussed problems such as scarcity of water, deforestation, soil degradation and decreasing

diversity of food crops. One women said: “We are worried, because we cannot feed our families. We should work together to improve our lives and to take care of the environment so that our resources will not disappear”. They wondered why they had so little access to credit, why they did not own land, why they did not have access to technology, why they had so few livestock and crops. Likewise, they wanted to increase their income and invest in the items they needed: education, health, and better housing. Women had to spend a lot of time taking care of their families because, for example, they had to walk far for water and firewood.

They felt distressed because they did not have dignified future perspectives for themselves and for their children. No one, including the women themselves, valued their hard work, and as a consequence they had very low self-esteem. During reflections at AMOY meetings, they realised that a major cause of these problems was their lack of autonomy, including a lack of decision making power and poor access to productive means. AMOY followed an agroecological and ecofeminist approach that focuses on the empowerment of the women, on meeting livelihood needs, and on the recuperation of local space, with local knowledge, local biodiversity and a strong relationship with nature.

Agroecological practices for greater autonomy Through AMOY, the women started to systematically apply organic fertilizers and soil conservation practices, decreasing their dependence on external agrochemical inputs, and strengthening their autonomy. Today, 87 % of the farms produce with self-made organic fertilizers, and 62% of the animals are fed with products and residues

from the farm. The introduction of appropriate technologies such as bio-composting, solar driers and fuel efficient stoves helped to save energy and time spent on fuel collection. Through encouraging agrobiodiversity several local crop species were rescued from disappearance and local cultural food practices were revived. According to a recent inventory, in total the women currently grow 82 crops for food, medicines and animal fodder. Also, 7 kinds of domestic animals are reared, including 13 local breeds of chickens. Subsequently, the increased production, a credit system, as well as a revolving fund of livestock and materials (for example for building stables or making biopreparations) helped to build capital.

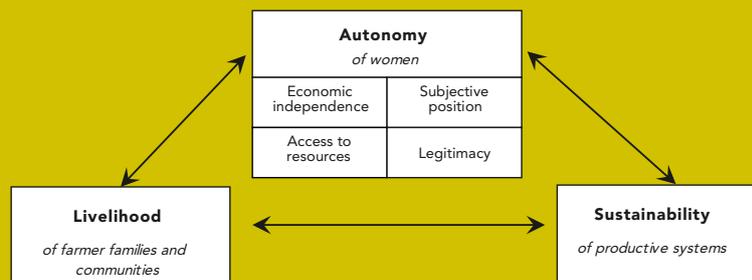
In their fight for autonomy, the women also achieved transformations within the family

To improve livelihoods, the women of AMOY opted to prioritise production for self-consumption and the diversification of farms, thereby laying the basis for a viable and stable economy instead of depending on the unpredictable ebbs and flows of the market. Currently, the farms produce more than half of the food for their families, while the other half of the food is obtained from exchange and gifts, or bought at the market.

The approach of AMOY

The transitional agroecological approach of AMOY places women’s autonomy in the center and relates it to socio-political, ecological and economic dimensions. The socio-political dimension includes the social movements that seek social and ecological justice. The ecological dimension aims at recovering the sustainability of agricultural systems and ecosystems. The economic dimension focuses on livelihood, accumulated knowledge, potentialities, resilience capacity,

innovation and mutual support. AMOY addresses the three dimensions interlinking autonomy, with livelihood and sustainability.





The great diversity of farmer Sofia's farm.
Drawing: Diana Isaza. Photo: Gloria Zuluaga

The women increased their autonomy step by step by developing strategies to improve access to resources. They shared their animals and tools according to their needs, and they got small loans from rotation funds and micro-credits. Thanks to these mechanisms, the women have achieved ownership of livestock, and, in some cases, of the houses where they live and the land they cultivate. In their fight for autonomy, the women also achieved transformations within the family, becoming less subordinated and acting against domestic violence. One woman said: "While we were achieving new income and production resources, our position in our homes changed." Now, they receive more respect for their knowledge and labour, and their husbands are getting more involved in farming. The improved self-esteem and better access to resources have reaffirmed women in their role as food producers and contributed to the construction of an identity based on their own strengths and capacities.

Escalation of the conflict AMOY's approach proved to be powerful in day-to-day practices, but was also important in crisis situations related to the country's armed conflict. A few years after

AMOY's foundation, the situation in Colombia severely worsened. At the end of the 1990s the armed conflict escalated, and their lives were continuously at risk. AMOY participated in 'Women's Pacifist Route', a movement against the war that calls for political negotiation as a way out of the armed conflict. Being part of this movement empowered AMOY to publicly speak out for truth, justice and reparation. During these violent times about 50 people were killed in the town of Yolombó and about 700 people fled the area. Many people, especially women, lost their property as paramilitary groups occupied their land. Moreover, in this period community meetings were explicitly prohibited by the paramilitary groups, so that it was also difficult for women to discuss and develop long-term strategies based on agroecology. The emphasis on day-to-day survival and self-sufficiency was the priority at this time, when it was very difficult to buy food from the market. Worst of all, there were periods in which the parties in conflict forced the

Farmer Ismenia working at her agroecological farm.
Photo: Jan de Jong





Dora on the land that she bought with microcredit from AMOY, she grows coffee and several food crops. Photo: Sonia Cárdenas



Sofía walks through her farm, an agroecological forest of less than one hectare. Photo: Sonia Cárdenas

farmers to give them their animals and crops. Because of this, the women decided to raise fewer animals which caused a setback in the agroecological transition process.

AMOY helped its members cope with the cruelty of war

In 2000, when the ban on meetings was lifted after two years, the women groups re-activated themselves and the women that returned to Yolombó received help from AMOY in the form of seeds and breeding animals. AMOY prioritised projects for the reconstruction of farming systems. Apart from the agroecological activities, during this period the organisation also helped its members cope with the cruelty of war. It was a space to express fear and sadness, to find refuge, and to develop strategies to protect themselves from armed groups. AMOY organised symbolic, ritual events to commemorate the beloved victims, and to help cure the wounds of the community. Rituals for example consisted of naming the dead and naming their souls, while collectively planting forage crops on places where massacres occurred.

Since 2005, many people, especially young men, have left the farms. This has been in part because of the conflict, but also because of the lack of policies that promote small-scale agriculture, and steady deterioration of natural resources because of deforestation, erosion and mining. In this context AMOY continues

to re-invent itself, improving agroecological practices that ensure food security and income sources from local markets, based on women empowerment and solidarity.

Towards a future of peace After the violent decade there are still many borders to cross. There continues to be a lot of outmigration of men, and agroecology remains mostly a women's strategy. A major bottleneck is the absence of a long-term peace agreement. In this sense, the current peace talks in Havana between the guerrilla and the government provide hope for a period of stability and improved conditions for a further advancement of the agroecological transition in Yolombó.

The journey of AMOY represents a collective path of permanent reflection and learning and shows that agroecological transition cannot be seen as separated from other aspects of life, especially in a context of violent conflict. Particularly, AMOY's approach of linking livelihood, sustainability and autonomy proved to be very effective for its members, especially where practical farming strategies were linked with organisational strengthening. It shows that in critical circumstances such as the armed conflict, agroecology helps build resilience and adaptation to changing situations. The process of AMOY not only has been directed towards the restoration of ecological principles, but also towards the capacity of women to decide on their present, and to influence their future by exercising citizenship and building confidence in their own capacities.

Sonia Irene Cárdenas Solís is from Colombia and doing a PhD on natural resources and sustainability at Córdoba University in Spain. She is also a gender consultant with the World Wildlife Fund in Colombia (cardosysoles@yahoo.es).



Photo: Ricky Strandberg

Peasant women power in Mozambique

Women peasants in Mozambique are rescuing an agroecological model that goes against industrial, large-scale food production. They are also rising up in protest against land grabbing, a trend that threatens to displace local farmers. In doing this, these women set Mozambique on a path toward sustainable development, while strengthening their positions, defending native seeds and supporting local, healthy food.

Boaventura Monjane

Agroecological methods of farming have always been a part of the social and cultural life in Mozambican rural communities. To strengthen these practices in the face of corporate agriculture, the Mozambican Farmer's Union, UNAC, has promoted the practices of agroecology, such as the conservation of native seeds and local systems of food production, for a number of years. Women play a key role in many of UNAC's initiatives.

Widows creating a healthy system

The village of Namaacha is located in the Maputo Province, bordering Swaziland. In this area most of the food is imported from Swaziland and South Africa. As a result, Namaacha used to be flooded by foreign food products grown with a lot of chemicals.

This changed when women started to organise themselves in local producer organisations. One of these is the Association of Strawberry Producers of Namaacha (APMONA), consisting mostly of widows

and their families. When a man dies he leaves behind a great responsibility to his wife to take care of the family, feed the kids, keep the house, send children to school *and* produce food on the land. The widows of the Association are farming as their main (and in many cases only) economic activity to support the family. They resolved to grow their food in a way that is consistent with agroecological principles.

Their production is based on a model that divides the land into individual and community plots. From the community plot, a portion of the produce goes to each member and her family, and the rest is channelled to the local market in Namaacha. The benefit of having a collective *machamaba* (field) is that peasants share knowledge with each other – it's a space for learning.

With some support from UNAC, the women introduced crop diversification to the region, and started to grow onion, tomato, cabbage, lettuce and carrots. Previously, the women had only been producing strawberries to sell in Maputo. Now, they are producing many different crops using organic fertilizers, composts and biodiversity-based techniques. The main fertilizer is manure from cows and the mulch is hay which is spread to avoid weeds and maintain soil moisture. Rosa Jorge Obete, co-founder of APMONA, asserts that since she has switched to agroecology, she has saved more money in production, especially since she avoids the costs of chemicals. "It has allowed me to put my children in school and helped me with daily costs. We are now able to manage our expenses. We live well, not like before," says Obete.

Defending land and livelihood

The initiative of APMONA emerged in a context of struggle and resistance. Over the past few years, Mozambique has become a major stage for land grabbing for forest production, tourism development, or agribusiness, the latter being the new trend in Mozambique. The agribusiness model of agriculture produces crops that are usually alien to the local community, such as soy, maize and sugar cane, which are aimed at world markets and other countries' demands for food, cattle feed and biofuel rather than at the food needs of the local population. As land in Mozambique is legally owned by the state, concessions are given to foreign companies for 50 years and are renewable for another 50. In Mozambique, agriculture could soon become a corporate-driven sector, with local peasants being dispossessed and displaced, losing their means of livelihood as well as their ancient cultural connection to the land.

UNAC is resisting these trends, finding alternatives to the prevailing system. UNAC women gather regularly in assembly to discuss the challenges they face and strategise for actions to fight back and defend their

land and livelihood. Through the Rural Women Assembly, women peasants have been challenging the government and organised protests and marches across Southern Africa demanding accountability from politicians. The Rural Woman Assembly has also been active in collecting, improving and conserving native seeds. These actions have to be seen as resistance to the hegemony of the 'development discourse', promoted by initiatives such as the Alliance for Green Revolution in Africa (AGRA) and the New Alliance for Food and Nutrition Security.

With models such as agroecology based on community supported methods of production, peasant agriculture is ultimately more inclusive, sustainable, equitable and stable than any other farming method. This model empowers rural women, guarantees the livelihoods of future generations and ensures food sovereignty at the community and national level. It would, finally, set Mozambique on a path, over the long-run, toward sustainable development, while supporting women producers, defending native seeds, protecting the environment and supporting local, organic food production.

Until mid 2015, **Boaventura Monjane** (boa.monjane@gmail.com) was a communications officer of La Vía Campesina, based at the UNAC office in Maputo. He is currently pursuing a PhD.

Farmer in Namaacha proudly showing her strawberries. Photo: Ricky Strandberg.





Photo: Sarah Nischalke

Women drive alternative economies in the Himalayas

In the Himalayas, male outmigration and the effects of climate change create challenges for rural women. Many of them develop innovative farming practices based on agroecology, push alternative economies and create niche markets. Women in India, Nepal and China show how agroecology can be a strategy to adapt to changing circumstances, and to drive positive social change.

Sarah Nischalke

Young men from even the remotest places in the Himalayan mountains are leaving their homes in search of income opportunities elsewhere. This trend of outmigration has been driven by increased mobility and access to information, in combination with the effects of climate change, including both increased flooding and drought. Drought and erratic rain hamper rain-fed farming in the region. Floods destroy cultivated fields by sand casting, sweeping away seed and food stocks and killing livestock. Families do not see agricultural investments as viable anymore and for farmers who mostly have agricultural skills the best option seems to migrate. When men leave, they abandon the farms and lose interest in agriculture while their families stay behind. Women are therefore faced with challenges to produce food without the labour of their husbands. This case illustrates the innovative capacity of women, not only to adapt to changing circumstances, but also to drive positive social change through agroecology.

Traditionally both women and men shaped the way farming was done in the Himalayas. The male household heads would choose the cash crops, the livestock and also decide on innovations. Women would make decisions about farming for household consumption such as the home gardens and small livestock. Women are not allowed to plough but do other work such as planting, weeding or firewood and fodder collection.

Navigating environmental stress Outmigration of men challenges women to get tasks done that are traditionally for men, such as ploughing. Remittances are often not enough to enable the women to hire labourers and compensate the lack of labour on the farm. Many engage in sharecropping arrangements, while others abandon the land and try to find alternative jobs so that they can buy their staple foods. In very rare cases in Nepal, women who trespassed cultural boundaries have learnt how to plough and were seen on their fields behind their two oxen.

In addition to the increased workload for women in the absence of men, women have to deal with climate change related disasters for which they are often unprepared. This is harder for them since women do not have the same access as men do to markets, extension services or alternative livelihood options that could help them respond to climate stress. Their access is restricted by limited mobility and other cultural constraints. Recent field research produced interesting examples from the region that showed how under environmental stress women who live in villages that suffer from male outmigration develop new farming practices, push alternative economies and create

niche markets. Here are three examples from India, Nepal and China.

Sharing resources in Assam, Northeast India In the district Tinsukia, at the river bank of the Brahmaputra River in India, annual floods regularly damage agricultural crops. The farmers managed to adapt to the floods with diversification in crops and livestock as well as sharecropping arrangements. However, in 2012 a big flood caused colossal damage to infrastructure, livestock and crop and agricultural land. Many of the households that reported sand casting on their farmland assessed that they would not be able to cultivate the affected land for the next two to five years.

Women's response to the flood was a system called *bhagi*, which included sharing of small livestock, handicraft skills and land by engaging in sharecropping. For example, one family borrowed a pair of chicken from their neighbours and took the responsibility of their daily care on the condition that when young chicks were born, they would be divided equally between the lending and borrowing families. Women also initiated other forms of bartering such as exchanging their weaving skills in exchange for material. Women pushed their families to engage in sharecropping arrangements, where the land owning family invests in all external inputs including tractor, seed, fertilizers, pesticides and irrigation while the working family puts in labour. The harvest is then shared equally between the two families.

In this way women relieved themselves of some additional responsibility and workload that came with the floods and still ensured good care of their families. In migrant households, where remittances are not enough to compensate for the lack of labour on the farm, such arrangements became extremely important.

Women engage in sharing arrangements to cope with labour shortages and climate stress.

Photo: Sarah Nischalke.





Trees were planted as an alternative to more labour-intensive vegetables. Photo: Sarah Nischalke.

Switching to fruit trees in Central Nepal

In Kavre District in Nepal where outmigration of men is high and rain patterns are erratic, farmers founded cooperatives to facilitate organic vegetable production and rain water harvesting. This was supported by the Appropriate Agriculture Alternatives training centre. The produce was bought at fixed rates and sold in Kathmandu markets.

However, because of an increased number of households without a male household head, the training centre extended its activities to promoting fruit and nut trees such as almond or macademia, which need less water than vegetables. It was accompanied by trainings in biointensive farming, extension work with local communities and research with regard to new varieties that could suit the Nepali context.

Several women were interested in growing fruit trees to increase their income and secure their livelihoods because of fluctuating remittances from their husbands or sons. However, there were two major obstacles. First, the initial investment into trees is high and it takes several years before income can be achieved. Second, some elderly in the area believe that trees should not be transplanted from one place to another. This is a cultural and social barrier to innovation. However, a couple of the families managed to convince their elders and are now trying out the tree varieties as a new income source that helps them to ensure their food security in an unfavourable climate.

Growing herbs in Yunnan Province, China

Towards the other side of the Himalayas, in the Yunnan Province of China, drought is a major problem for the farmers. In the small village of Weng Mu, a few hours north of Kunming, which is dominated by the Yi, one of the many ethnic minorities of the province, drought hampered the rain-fed crop production of wheat, maize and potato. Several elderly women, encouraged by an emerging small-scale processing industry of medicinal herbs, began planting of maka (*Lepidium meyenii*) as a new livelihood source. It is used for culinary and medicinal purposes enhancing energy, stamina and fertility.

They have been cultivating *maka* for 2-3 years now and in some cases up to half of their land is occupied with the medicinal plant, which not only gets them a good market price, but needs little care and is more resistant to water stress. The women use seed from small scale seed saving and exchange initiatives in the area. Despite the higher dependency on markets, they are proud that they triggered the changes in farming and are able to support their families.

Women as innate innovators

These examples show successful experiences of women coping with climate stress and outmigration of men, at the same time improving their autonomy, ensuring their food security and reducing hard labour. They do not only show that women are able to develop successful coping strategies but it also becomes clear that women are innate innovators. Gender roles are changing as part of the social transformation in the region. Women start experimenting and try out new ways of farming when pushed to the wall in the context of environmental stress and migration. These innovations sometimes require breaking through cultural barriers as in the case from Nepal.

For the most part, however, women have not gained much with respect to power relations. Decisions on farm management, field and cash crops or livestock are still mostly taken by men (be it from a distance or by male relatives). These decisions are often based on economic considerations only, while women tend to take into account social, cultural, nutritional and other factors in their decisions. However it appears that the more gender roles change, the more can women utilise new spaces and opportunities, become innovators and overcome challenges step by step.

Sarah Marie Nischalke (snischal@uni-bonn.de) is Senior Researcher at the Center for Development Research, Bonn, Germany. The research on which this article is based was conducted as part of her former position at the International Center of Integrated Mountain Development.

The medicinal herb maka is planted because it is resistant to drought stress and brings extra income.

Photo: Sarah Nischalke.





Photo: Neil Palmer/ CIAT

Shifting **African** policy towards **women** and **agroecology**

The role of rural women and smallholder farmers in African society has been highly undervalued. This is so despite the fact that around 80% of Africa's population is dependent on smallholder agriculture, it is the backbone of the rural economy, and women provide over two-thirds of the farm labour. There is clear evidence that agroecology is crucial for women farmers. Now we face the challenge of discovering how its principles can best be promoted and how practice can inform policy at local and national level.

Sabrina Nafisa Masinjila

Recently, we have seen unequivocal changes in policies that are transforming African agriculture to facilitate a 'Green Revolution'. These policies articulate and promote a form of agriculture that focuses on monocropping, expensive external inputs such as agrochemicals and synthetic fertilizers, hybrid/genetically modified seeds and large-scale land acquisition. These changes in policies are a result of government alliance with institutions such as the Alliance for Green Revolution in Africa (AGRA), multilateral institutions, donors and multinational corporations that aim to produce a layer of commercial surplus producers. This was reaffirmed in a report published by African Centre for Biodiversity in 2014. For example, soil and seed programmes under AGRA tend to favour the introduction of synthetic fertilizers while supporting and preparing institutional and technical grounds for public-private partnerships in the seed sector.

The G8 New Alliance for Food Security and Nutrition in Africa was launched in 2012, where 10 African countries made numerous policy commitments in order to ensure agricultural transformation within their countries and ultimately to 'lift 50 million people out of poverty in 10 years'. The initiative is largely dominated by multinationals. It requires states to revise their seed, land and tax policies and legislation in order to secure investment.

Such policy changes are evidenced through the adoption of Intellectual Property laws by African countries at the national and regional level. These seed laws give strong rights to commercial breeders while restricting farmers' rights to save, use, exchange and sell protected varieties/seeds and propagating materi-

New laws restrict farmers' rights to save, use, exchange and sell protected seeds

als. They favour the use and adoption of improved varieties that are uniformly bred and that must be used with agrochemicals in order to attain high yields.

At the same time, there is a speedy acquisition of large tracts of land by governments to be allocated to private investors for commercial viable crops in agricultural corridors through agricultural development plans. This acquisition displaces smallholder farmers, in particular women, who depend on this land, and forces others to grow commercial crops while abandoning food crops, a huge threat to food security. These initiatives and programmes contrast sharply with the priorities of the majority of smallholder farmers who practice ecological and sustainable farming techniques such as agroecology that are inexpensive, simple and effective.

Women as custodians In many rural areas, women tend to manage complex production systems with multiple functions, purposes, and species. They produce, handle and prepare food, while being responsible for the nutrition of their families. They provide most of the labour for farming, from soil preparation to harvesting. Further to that, after harvesting, they are almost entirely responsible for operations such as storage, handling, stocking, marketing and processing.

And they know how to take care of the needs of the household. For example, women who wanted to improve their situation are now growing various kinds of African leafy vegetables alongside their other crops, some of which are cash crops. These vegetables are an important component of the diet for rural and urban dwellers. They are affordable and also rich in micronutrients. They maintain genetic diversity while improving nutrition and livelihoods. In Kenya alone, there are over 200 species of African leafy vegetables and these are mostly produced by women.

Such production systems based on diversity are not designed to maximize the productivity of any single crop but to ensure overall stability and resilience of the farming system as a whole. The chosen crops are often of minor commercial significance, but of great importance for household nutrition and food security. This essential work carried out by women is often invisible and neglected by support agencies due to its

A farmer from Rwanda. Photo: Neil Palmer/ CIAT





Rural women in East Africa. Photo: Neil Palmer/ CIAT

lack of commercial value. The current mainstream agriculture trajectory does not value such initiatives of women based on principles of agroecology. Instead, it is reducing the role of smallholder farmers and women in particular, and is leaving them out of the decision-making process regarding policy and development.

Farming based on diversity is not designed to maximise productivity but to ensure overall stability

Women are the custodians of seed saving, ensuring food security and genetic diversity. Unfortunately, the new seed and plant variety protection policies and laws marginalise women and criminalise their age old practices of unfettered seed exchange. Likewise, the threat of the introduction of genetically modified seed is now real within our region, and in my own country, Tanzania. Current regulations to ensure the safety of the smallholder farmers' environment and the food they produce for their families and markets are being changed without their involvement. Limited farmer awareness about the adverse impacts of these technologies also compromises farmers' abilities to defend their positions.

Shifting policy With the large presence of smallholder farmers in agricultural production, policy dynamics at every level need to shift so that smallholder farmers - especially women – participate in decision-making and can ensure their priorities are reflected in appropriate agricultural policies. These agricultural policies need to ensure that the power of choice and innovation remains in the hands of

smallholder farmers, their organisations and communities that produce food. This is equally true for pastoralists, fishers, and forest dwellers who contribute to the food system in sustainable and significant ways.

Policies at all levels need to focus on:

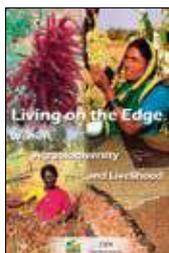
- Ensuring that farmers, especially women, remain at the centre of localised seed production systems and that farmers define needed improvements to seeds;
- Supporting farmer-led extension networks that provide training for farmers on agroecological techniques, while linking them to research and resources;
- Recognising and expanding farmer-managed seed diversity, local germplasm and organisational and technical capacity;
- Allocating land to smallholder farmers and ensuring access for women and youth;
- Removing ownership on seed that is supplied to farmers by public institutions and programmes.

This leaves no doubt that despite the lack of clear policy commitment to support women and agroecology, there is a renewed and growing momentum of social movements that continue to advocate, practice and diversify farming systems through agroecology. These movements are bound to influence decision making and adoption of agroecological principles at the international and national spheres. Once the principles of agroecology are firmly embedded in African policy making, women can regain their rightful position at the centre of agricultural transformation.

Sabrina Nafisa Masinjila (sabrina@acbio.org.za) is the Outreach and Advocacy Officer for the African Centre for Biodiversity <http://acbio.org.za/>. She focuses on biosafety, farmers' rights, seed and food sovereignty in East Africa. The statements in this article were first presented at the Africa Grantmakers' Network Assembly in July 2015 in Tanzania, at a session sponsored by the New Field Foundation.

Sabrina Nafisa Masinjila.

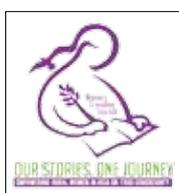




Living on the edge: women, agrobiodiversity, and livelihoods

V. Ramprasad, 2015. Green Foundation and Third World Network, India, 109 pages.

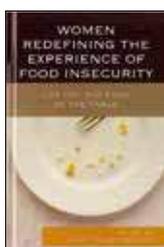
The predominance of commercially-marketed crop varieties and associated, enabling policies are displacing indigenous varieties cultivated over many generations. This loss of agricultural biodiversity puts both food security and the livelihoods of farmers at risk. These farmers now find themselves tied to a corporate-controlled supply chain. To counter this threat to sustainable food production, there is a need to turn to the enduring custodians of agricultural biodiversity – small farmers, in particular women farmers, who are the repositories of traditional knowledge of seed conservation and the providers of food for their households and communities. Drawing on more than 20 years of the author's work with Indian women farmers in on-farm conservation, *Living on the Edge* makes it clear that efforts to safeguard agricultural biodiversity must go hand in hand with the protection and promotion of farmers' rights everywhere.



Our stories, one journey: empowering rural women in Asia on food sovereignty

M. Busto, N. G. P. Mercado, S. V. Rengam, D. Zita, M. Castillo, K. Acosta, T. K. Lopez, and L. Covero, 2015. Penang, Malaysia, 58 pages.

Every day, rural women in Asia face mounting challenges caused by an increasingly broken system of food and agriculture. High food prices, low income, land grabbing, climate change and decreasing control over seeds mark the experiences of women farmers who grow much of the region's food. This book is a travelling journal and presents the experiences of eight rural women in the Philippines, Indonesia, China, Cambodia, India, Sri Lanka, Malaysia and Vietnam. The women describe their struggles against, for instance, land grabs from palm oil companies, but also hopeful initiatives in ecological agriculture. Expressions are not limited to descriptive texts but also in drawing, poetry and songs. Their message is simple: help transform agriculture into a more equitable, fair and sustainable system!



Women redefining the experience of food insecurity: Life off the edge of the table

J. Page-Reeves (ed.), 2014. Lexington Books, 346 pages.

This book is about understanding the relationship between food insecurity and women's agency. The contributors explore both the structural constraints that limit what and how much people eat, and the myriad of ways that women creatively and strategically re-structure their own fields of action in relation to food, demonstrating that the nature of food insecurity is multi-dimensional. The chapters portray how women develop strategies to make it possible to have food in the cupboard and on the table to be able to feed their families. Exploring these themes, this book offers a lens for thinking about a food system that incorporates women as agentive actors and links women's everyday food-related activities with ideas about food justice, food sovereignty, and food citizenship. Taken together, the chapters provide a unique perspective on how we can think broadly about the issue of food insecurity in relation to gender, culture, inequality, poverty, and health disparity.



Women and food sovereignty: voices of rural women of the south

L. Silva and K. Nansen (eds.), 2011, Friends of the Earth International, Amsterdam, the Netherlands, 40 pages.

This document presents testimonies that reflect the situation of rural women in Latin America, Africa and Asia. The inequality faced by women is evident with respect to denial of basic rights, gender-based violence, economic discrimination and the negative impacts of agribusiness and extractive industries which disproportionately impact women. The testimonies also show alternative approaches to the agribusiness model. Many of the actions taken by women to fight for their rights are in fact traditional practices that they have recovered and sustained. The first thematic area includes an overview of the main issues facing women. The second includes testimonies that focus on the values and worldviews of rural women on agriculture, biodiversity and work. The third section highlights the struggles and resistance of women and the alternatives they implement to secure a more just world.



Promises, power and poverty: Corporate land deals and rural women in Africa

N. Tandon and M. Wegerif, 2013, OXFAM International, Oxford, UK, 26 pages.

The rush to invest in farmland in Africa is having an immediate impact on women's land-use options, their livelihoods, on food availability and the cost of living, and, ultimately, on women's access to land for food production. These are only the economic impacts. Women's knowledge, socio-cultural relationship with the land, and stewardship of nature are also under threat. Too often ignored, rural women's voices and perspectives need to be heeded urgently if a robust rural economy and food for all are to be guaranteed.

More on women

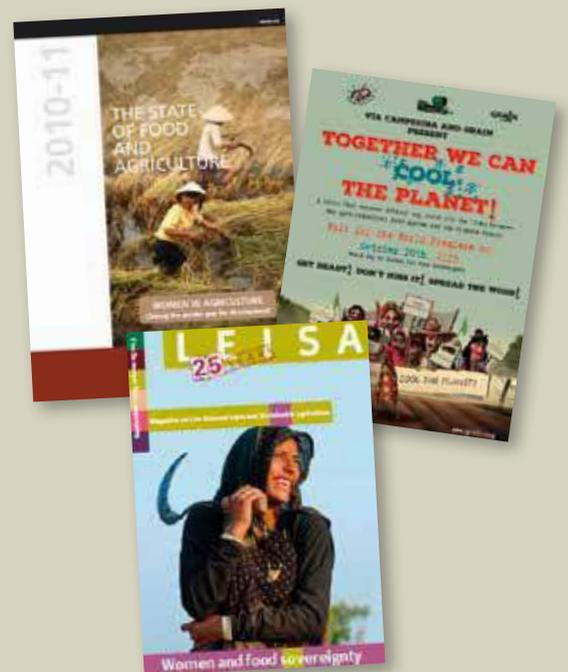
This box lists a few more publications and an animation which, in their own ways, provide deeper insight into the struggles and solutions brought by women.

The state of food and agriculture: women in agriculture (FAO, 2010). The agriculture sector is underperforming in many countries, and one of the key reasons is that women do not have equal access to the resources and opportunities they need to be more productive.

Together we can cool the planet (La Via Campesina and GRAIN, 2015). Women are key to cooling the planet. This animation gives

you the information you need to understand how the agroindustrial food system is impacting our climate, and at the same time what we can do to change course and start cooling the planet. And every single one of us is part of the solution!

Women and food sovereignty (LEISA Magazine 25.3, 2009). Despite the important contribution of women to agricultural production, the perception persists that what women do is marginal. This back issue of Farming Matters reveals the way in which women are deeply involved in the food sovereignty movement.





Members of the AgriCultures Network are working together to advance family farming and agroecology. Here is our latest update.

Senegal: Africa-wide symposium on agroecology

FAO's regional symposium on agroecology for the Sub-Saharan Africa region took place in Senegal (Dakar) Nov. 5 & 6, preceded by civil society meetings on November 3 and 4. Representatives of the AgriCultures Network from Ethiopia (MELCA) and Senegal (IED Afrique) were central actors in the local and regional planning processes for these seminars. They also worked together with the IPC, the International Planning Committee for Food Sovereignty and with AFSA, the African Alliance for Food Sovereignty.

Around 40 social movements' and other CSO delegates participated in the symposium, with a good gender balance and representation from around 20 African countries. Other participants represented governments and research institutes. Civil society left the symposium on a positive note. All though the practice of agroecology has a long history in Africa,

the movement is much less developed and agroecology has so far enjoyed little support from governments. At the end of the symposium, 23 recommendations were developed to move agroecology forward in the region. While the recommendations remain very general and it is not clear if and how progress will be monitored, they do provide a basis from which to move things forward.

A selection of recommendations:

- Ensuring producers' (especially women, youth and indigenous peoples) access to natural resources, including land, water and biodiversity by setting up user-friendly procedures for land acquisition, registering and security. In this context, application of the voluntary guidelines for responsible governance of tenure of land, fisheries and forests.
- Creating platforms to collect and exchange agroecological experiences and innovations;
- Setting up tools which facilitate the transformation systems of agri-

cultural subsidies, research, trade and investment in support of agroecology;

- Setting up pilot projects at territorial level such as agroecological territories;
- Developing and implementing public procurement policies in support of local and agroecological products;
- Defending the diversity of local peasants seeds against any external negative influence;
- Developing agroecology independently of climate smart agriculture and proposing at COP 21 that an international protocol for agroecology is set up and adopted by national governments.

The last regional symposium (for Asia) took place at the end of November in Bangkok. The AgriCultures Network is following the process and documenting the outcomes of each regional symposium. They will be synthesised in a publication to come out at the start of 2016.

CALL FOR ARTICLES

Valuing underutilised crops

As family farming, nutrition and agrobiodiversity are increasingly put in the spotlight, Farming Matters focuses its attention on 'underutilised' crops. These are plant species that have been used for centuries or even millennia as food, fibre, fodder, oil or medicine, but are no longer very common. Many of these crops are of great value for nutrition, climate resilience and risk diversification. The globalisation of food systems, however, has led to a situation where currently a mere fifteen crops provide 90% of the world's food, with three crops - rice, maize and wheat - making up two-thirds of this total (FAO).

Different factors have pushed the revaluation of underutilised species. In rural and urban communities India, there is a revival of minor millets as nutritious and climate resilient food. Andean chef cooks 'rediscovered' a diverse range of potatoes, beans, tubers, and traditionally used vegetables and grains which resulted in a gastronomic boom that created new markets for small scale farmers. In Africa, the unique properties of crops such as dawa dawa, teff and leafy vegetables receive increased attention through food fairs and celebrations. This calls for renewed attention to underutilised crops by mainstream policy, research and extension, especially as many countries struggle to address malnutrition. Farming Matters seeks cases where underutilised crops have gained renewed popularity.



The year 2016 is the International Year of Pulses. Pulses, such as lentils, beans or chick peas are a critical component of a balanced and nutritious diet, and they are important sources of fodder and soil fertility. Therefore, in honour of the Year of Pulses we are especially interested in stories about the revival of pulses.

We are looking for stories that analyse how underutilised crops have been revalued. We seek examples of communities that continued growing and processing them contrary to dominant trends. What were the successful strategies and the challenges to reviving the knowledge and the use of the underutilised crop? How did production, processing and preparation of food change? What role did markets, policy, research or local food and farmers' movements play? What changes did this bring to rural and urban communities? What was the role of youth?

Articles for the June 2016 issue of Farming Matters should be sent to the editors before 1 March 2016. www.agriculturesnetwork.org/submit

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Address

P.O. Box 90, 6700 AB, Wageningen, the Netherlands
Tel: +31 (0)317 760 010
E-mail: ileia@ileia.org
www.ileia.org

Editorial team

This issue has been compiled by Jessica Milgroom, Henkjan Laats, Janneke Bruil, Edith van Walsum, Leonardo van den Berg and Danielle Peterson.

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The AgriCultures Network

ILEIA is a member of the AgriCultures Network; five organisations that provide information on agroecology and family farming worldwide, and that publish: LEISA revista de agroecología (Latin America in Spanish), LEISA India (in English, Hindi, Kannada, Marathi, Oriya, Punjabi, Tamil, Telugu), AGRIDAPE (West Africa, in French), Agriculturas, Experiências em Agroecologia (Brazil, in Portuguese) and Wegel (Ethiopia, in Amharic).

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**AGROECOLOGY
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WOMEN, GUARANTEES
THE LIVELIHOODS OF
FUTURE GENERATIONS
AND ENSURES FOOD
SOVEREIGNTY.**

Boaventura Monjane, page 37

**With conventional
farming, we have to
spend a lot of time
and energy, but with
SRI farming, we use
our brain.**

Tea Sarim, page 29

**AGROECOLOGY HELPS US
WOMEN TO GROW HEALTHY
AND DELICIOUS FOOD TO
NOURISH OURSELVES AND
OUR FAMILIES.**

Ann Doherty, page 19

**Women are the
custodians of seed
saving, ensuring
food security and
genetic diversity.**

Sabrina Nafisa Masinjila, page 43

