



ORGANIC AGRICULTURE AND WOMENS' EMPOWERMENT

by Cathy Farnworth and Jessica Hutchings





ORGANIC AGRICULTURE AND WOMENS' EMPOWERMENT

by Cathy Farnworth and Jessica Hutchings¹

¹ Equal Co-Authors:

Dr. Cathy Rozel Farnworth, Pandia Consulting
The Rookery, Warleggan, Near Bodmin, Cornwall
PL30 4HB United Kingdom

cathyfarnworth@hotmail.com

Dr. Jessica Hutchings
Papahakaritorito Organics
Community Mail Box 65, Kaitoke, Upper Hutt,
Wellington, Aotearoa, New Zealand

Jessica.Hutchings@vuw.ac.nz

Published in Germany by IFOAM

© IFOAM, April 2009

Detailed bibliographic data is available in the internet at <http://dnb.ddb.de>

ISBN 13: 978-3-940946-15-7

Printed copies of this publication may be ordered via the IFOAM website at www.ifoam.org

A download of the complete publication is available via the IFOAM website

ORGANIC AGRICULTURE AND WOMENS' EMPOWERMENT

TABLE OF CONTENTS

List of Text Boxes	vi
List of Acronyms	vi
Acknowledgements	vii
1. EXECUTIVE SUMMARY	1
1.1. Recommendations	6
1.1.1. Making an Active Choice for Gender Equality	6
1.1.2. Working Positively with Indigenous People	6
1.1.3. Situation-Specific Interventions	7
1.1.4. Appropriate Market-Orientated Production	8
1.2. Continuing Research Needs	8
2. METHODOLOGIES, ASSUMPTIONS, EPISTEMOLOGIES	11
2.1. Women's Empowerment and Gender Relationships	11
2.2. Defining Organic Farming	12
2.3. Indigenous Knowledge and Organic Farming	14
3. LITERATURE REVIEW	18
3.1. Gendered Identities in Farming	18
3.1.1. Associations Between Rural Masculinities and Farming	18
3.1.2. Gendered Spaces and Knowledge Production and Exchange	20
3.1.3. The Gender Division of Labour	21
3.1.4. The Contributions of Women Scientists to Organic Research	22
3.2. Challenging Gendered Identities Through Organic and Sustainable Farming	23
3.2.1. The Contribution of Women Farmers to Defining Sustainable Agriculture Paradigms	23
3.2.2. Space for Alternative Masculinities	23
3.2.3. Economic Valuation of Sustainable Women Farms	24
4. CASE STUDY DISCUSSION	26
4.1. Women's Empowerment and Organic Farming: Agency	26
4.1.1. Case Study Findings with Respect to Agency	27
4.1.2. Barriers to Agency	28

4.1.3. Measures to Increase Agency	30
4.1.4. Men's Support for Increasing Women's Agency	31
4.1.5. Recommendations	32
4.2. Women's Empowerment and Organic Farming: Structure	32
4.2.1. Case Study Findings	33
4.2.2. Key Points	34
4.3. Women's Empowerment and Organic Farming: Relational	35
4.3.1. Case Study Findings: Relational	35
4.3.2. Recommendations and Key Points	37
4.4. Market-Orientated Organic Agriculture: The Impact on Women's Empowerment	37
4.4.1. Case Study Findings: Market-Orientated Organic Agriculture	39
4.4.2. Key Points: Market-Orientated Organic Production	43
ANNEX 1	44
Presentation of Case Studies	44
A. East and South Asia and the Pacific (ESAP)	44
ESAP Case Study 1: The Green Foundation, Bangalore, India	45
ESAP Case Study 2: Krisoker Saar (Farmers' Voice), Bangladesh	47
ESAP Case Study 3: Women in Business Development Inc., Samoa	56
ESAP Case Study 4: Te Waka Kai Ora, National Maori Organics Authority of New Zealand	57
B. Latin America and the Caribbean	59
LAC Case Study 1: Asociacion de Productores Organicos del Uruguay (APODU)	59
C. North America and Europe	62
NAE Case Study 1: Organic Farming in California	62
D. Sub-Saharan Africa	63
SSA Case Study 1: Women's Organic Cooperatives in Uganda	63
SSA Case Study 2: Solidaridad	66
SSA Case Study 3: Sao Tomé and Principe: Participatory Smallholder Agriculture and Artisanal Fisheries Development Programme (IFAD Project)	69
ANNEX 2. IFOAM TOR	71
ANNEX 3: STUDY DESIGN AND METHODS	73
Case Study Selection	73
Analysis/ Interpretation of Information	73
Positionality and Reflexivity	74

ANNEX 4: LOCAL AND INDIGENOUS KNOWLEDGE	75
ANNEX 5. THE SURVEY QUESTIONNAIRE	78
ANNEX 6. THE GENDERED NATURE OF VALUE CHAINS	85
ANNEX 7. RESPONDENTS TO SURVEY QUESTIONNAIRE	I
REFERENCES	II

LIST OF TEXT BOXES**Box 1: Agency and Empowerment****Box 2: Local and Indigenous Knowledge****Box 3: Links Between Research Agendas and Women's Crops****Box 4: US Women Farmers Learn Through Information Seeking: Men Farmers Learn Through Shared or Observed Wisdom****Box 5: North American Farming Women's Perspectives on the Sustainable Agriculture Paradigm****Box 6: Culturally Specific Understandings of Agency: Mana Wahine****Box 7: A Cautionary Tale: Unclear Links Between Enhanced Social Capital and Control Over Physical Assets****Box 8: Formal or Substantive Gender Equality****Box 9: Mobility Constraints Upon Women's Access to Markets****LIST OF ACRONYMS****ADOPU** Asociación de Productores Organicos del Uruguay**CSA** Community Supported Agriculture**ESAP** East and South Asia and the Pacific**FLO** Fair Trade Labeling Organisations International**ICARDA** International Center for Agricultural Research in the Dry Areas (CGIAR Centre)**IFAD** International Fund for Agricultural Development**LAC** Latin America and the Caribbean**NAE** North America and Europe**OA** Organic Agriculture**SSA** Sub-Saharan Africa**TWKO** Te Waka Kai Ora (National Maori Organics Authority of NZ)**WAFF** West African Fair Fruit Project

ACKNOWLEDGEMENTS

We would like to thank the respondents to our survey questionnaire for the tremendous amount of time and care they devoted to helping us understand their approach to, and understanding of, women's empowerment in organic farming. They include:

Vanaja Ramprasad (Green Foundation), Edith van Walsum (ILEIA) and Irene Guijt (Learning by Design), Zakir Hossein and Shaila Shahid (Farmers' Voice), Percy Tipene (Te Waka Kai Ora), Karen Mapusua and Adi Maimalaga Tafuna'I (Women in Business Development Samoa), Norman Messer (IFAD), Marta Chiappe (Facultad de Agronomía, Universidad de la Republica, Uruguay), Laura-Anne Minkoff (University of California, Organic Grower/ Women's networks).

Many other people expressed an eager interest in our work and offered helpful suggestions. They include Arun Balamatti (AME Foundation), Sri Skandarajah (Swedish University of Agricultural Sciences), Annina Lubbock (IFAD), Ika Darnhofer (University of Natural Resources and Applied Life Sciences BOKU, Vienna), Temra Costa, Cornelia Butler Flora (Iowa State University), and Javed Rizvi (ICARDA Afghanistan).

1. EXECUTIVE SUMMARY

Gender relationships are fundamental worldwide to the way farm work is organised, the way assets such as land, labour, seeds and machinery are managed, and to farm decision-making. Given this, the lack of adequate attention to gender issues within the organic and sustainable farming movements is worrying. The revolutionary potential of sustainable approaches to farming to reshape our food systems, and the way humans interact with those systems, will not be realized unless there is a concerted effort by committed sustainable farmers and consumers to work towards gender equality. Indeed, the question addressed by this paper can be turned on its head. As well as asking how participation in organic and sustainable farming can empower women, we can ask: **How does the participation of women broaden and deepen the multiple goals of organic and sustainable farming?**

In this paper, we call upon the insights of the practitioners and academics who work in the sustainable and organic farming movements. We permit ourselves rather fuzzy boundaries, relying on the self-definition of the people involved. This is because the work of women in sustainable farming (as opposed to certified organic farming) is quite well-researched, particularly in the North, and thus offers deep understandings to this paper. For this reason we use the terms organic and sustainable interchangeably. We make it clear when we are speaking only of certified organic production. We recognise that ecological farming, and agro-ecological farming, are useful synonyms, although we do not use them in this paper.

Studies from indigenous communities are included in the belief that IFOAM and similar organizations primarily located in the ‘developed world’ can learn much from the practices and traditions of indigenous communities. The deep knowledge of such communities about local agro-ecologies, and the multiplicities of ways in which they create, interpret and interact with these ecologies, enables empirically verified farming practices to underpin sustainable approaches to farming. Such knowledge also enables more values to be brought into discussions about ‘sustainable and organic’ farming. This report is an important step in what we see as an urgent need for further work on understanding the interactions between the knowledge of indigenous women and organic agriculture.

Our findings show that conventional farming in the North is strongly identified with the expression of rural masculinities. One outcome is the creation of strongly male-gendered spaces, such as farm fairs, which are critical to knowledge production and exchange, yet to which women have almost no effective access. This can serve to restrict their learning, particularly experiential learning. Conversely, the very strength of the association of farming with male identity seems to make it more difficult for men in the sustainable farming movement to articulate the aspects of family life and spirituality that many women see as critical. For example, sustainable women farmers attempt to work more closely with natural methods (such as hand weeding) than do men, and prefer to work with family rather than hired labour, even if this means restricting the kind of crops that can be grown. Their practice is deviant not only from conventional agriculture, but also from how conventional male farmers express their identity. Thus, the continuing lack of women’s voice in farming means that the mainstream alternative agriculture paradigm

fails to capture important elements of why women are engaged in sustainable farming, and it also hinders the ability of men to express more nuanced identities. An example is the slogan favoured by the organic UK Soil Association: 'From plough to plate' – worldwide, ploughing is the very quintessence of a male farming activity.

Sustainable women farmers in the North generally produce for specialised, local markets. In this they are capturing the zeitgeist with its concern around carbon footprints, the logic of lengthy food chains spanning continents, animal welfare issues related to transportation before slaughter to distant abattoirs, and strong levels of interest in farmers' markets. Work traditionally conducted by women, in particular caring for animals and growing food for family consumption, is now becoming economically valuable. Markets are opening up for free range poultry, organic eggs, vegetables, etc and also value added products such as jams, jellies and baked goods. Such products derive from the typical reproductive role of women – the difference is that they form part of a whole food system approach on farms and have acquired economic value particularly because of this.

Although women working in organic sustainable production generally call themselves farmers, unlike women in conventional farming who tend to consider themselves 'farmwives', it is interesting to note that the gender division of labour per se is not being challenged, particularly on Northern farms. Women's work on both sustainable and conventional farms is similar. It is labour intensive, largely unmechanised, and rarely involves the application of inorganic chemicals.

The contribution of women scientists to developing organic paradigms has **diminished** over the past sixty years. The increasing institutionalisation and professionalisation of research has resulted in an ever-decreasing percentage of women scientists, particularly at the higher levels. As a consequence few women lead organic research institutes, and far fewer women than men publish research papers. Due to the different positioning of women in society, research domains in organic farming are narrowed and restricted by their absence.

Yet sustainable women **farmers** appear to have had more success in becoming part of, and contributing to, the development of sustainable farming paradigms. Although few statistics exist, those that do (for example, from the USA) show that women are much more present in sustainable farming than in conventional farming. However, it would seem that the category of 'organic' per se has less appeal to women than a broader determination to achieve a sustainable approach to farming. Although economic development of an enterprise is important - marketing products and reaching new clients - social and environmental motives often play a supporting role in the overall plans of such farmers. Women are primarily interested in producing for local markets, running small farms, and working with family labour. For women in particular, the boundaries between economic and non-economic activities are often fluid, as women seek to combine their roles as mothers and homemakers with community development and with income-generation. One message is clear: Women are much more likely than men to operate smaller scale farms. They are not necessarily full-time farmers; policy makers and researchers should relinquish assumptions that only full time farming that provides all or most of a family's

income counts as ‘real farming’. Apart from failing to capture the modern realities of farming, such assumptions seriously lessen farmers’ political voice and hamper their participation in sustainable and organic farming discourses.

A particular focus of this paper has been to examine the effectiveness of women’s agency (the ability to define one’s goals and act upon them). Research, conducted mostly in the North, shows that it has been hard for the voices of women to influence mainstream organic and sustainable farming discussion and policymaking; this paper is one attempt to address that silence. However, a flurry of research shows that women are defining sustainability in new and exciting ways. Indigenous people in organic farming, both men and women, are further challenging and expanding the meaning of sustainability, as they bring deep understandings of how to farm within agro-ecological niches and promote biodiversity. They are also showing different ways of interacting with ecologies and with people. For example, some indigenous organic groups take a ‘whole family’ approach to empowering women and in this sense are very supportive of men whose ‘masculinity’ is being challenged by their taking on of new roles, and of women who may be entering the cash economy for the first time. Working with indigenous women helps develop a better understanding of local agro-ecological diversity and its uses. It also enables culturally specific understandings of agency to be understood and worked with in organic farming initiatives.

Barriers to improving women’s agency include widespread deficiencies in policy support to women, and indeed to the organic farming sector as a whole. Most respondents to this paper suggested strongly that external partners are part of the problem; they appear to consider working with male producers almost inevitable. With respect to developing countries, male farmers are often seen as innovative farmers interested in export production; women are seen as subsistence farmers. Although there are some exceptions, it would appear that farmers on the ground are much more tolerant of women challenging local cultural norms around farming than outsiders, with stereotypical views, may be.

Effective agency is closely linked to resources, for without resources it is often impossible to realise a goal. Women worldwide have much less access to, or control over, privately-held resources such as land, machinery, or money, than do men. It can be hard for women to raise collateral for investment. Their access to resources held in common may be restricted. Lack of access to resources can seriously limit the ability of women to put their values into practice. Improving the access of women (and disempowered men) to privately held resources, and to resources held in common, is thus fundamental to sustainable farming. Locally appropriate natural resource management strategies that are gender-inclusive and pro-poor are, of course, required.

At the same time, it is important to avoid simplistic associations. Having more resources does not **automatically** mean having more agency, or voice. Indeed, it is precisely **because** women are frequently located differently to men both in relation to resources, and to the needs of the family, that they may express different issues with respect to sustainable farming. Respondents from the South suggested a range of measures to increase women’s voice, for example encouraging women to take up community leadership positions. Developing expertise in particular

aspects of farming seems to provide a critical underpinning to leadership and the ability to express one's views. Those women who felt most disempowered are those who feel they lack knowledge. Training was identified over and over as a need, including training in machinery use and repair, and in market analysis.

We also examined structure as a conceptual construct to help us understand the barriers to women's empowerment. **Structure** is about the political, cultural, economic and social structures within which Organic Agriculture operates. These structures are underpinned by values, assumptions and ideologies that perpetuate cultural norms. As such they cannot be objective. An analysis of situation-specific hegemonic ideologies and behaviours that may be impeding women's empowerment is required. Important from an indigenous perspective is that such structures do not perpetuate colonial worldviews and values. Rather, they need to see differing cultural worldviews and values as valid, and actively work with these values in the creation of programmes, organic standards etc.

Organic and sustainable farming has the potential to create new structures that actively work towards achieving women's empowerment and protecting the use of indigenous knowledge. This is a challenge for the organic movement, particularly certified organic, which is predominately driven and supported by political, cultural, economic and social structures that are located within western ideologies and practices.

Part of the challenge is to identify behaviour that is impeding women's empowerment in organic agriculture. This may include a dominance of western-based thinking with regard to women's empowerment and possible interventions. Culturally appropriate solutions need to be created by communities at the local level to address issues of structure.

The final analytic construct we used was relational. Relational describes the relationships inside our own communities and outside with external agencies as well as our ability to build, maintain and sustain community. In this study we were particularly interested in identifying how organic farming promotes more interdependent and accountable relationships between women and men and the key people and institutions they engage with in pursuit of their needs and rights. By focusing on relational within this study we were able to explore whether the involvement of women in organic farming actually promotes interdependent and accountable relationships that contributes to the pursuit of women's rights and needs. A consistent and clear message was that the structure that organic farming operates within continues to privilege and give priority to relationships with men over relationships with women.

The most noteworthy enabling factor to improve women's participation in organic and sustainable farming is to make a concerted effort at increasing their agency. Women need to participate in all decision-making aspects of sustainable and organic agriculture, as farmers, as researchers and as leaders. Observations made in the report include:

- When women have the support of men their agency improves.

- Training in organic methods appears to be a critical support to enabling women to take on leadership functions, so they quite literally know – and realise they know -what they are talking about.
- The sustainable agricultural sector (including organic) has been quite successful in creating women-friendly spaces. This is important for the exchange of ideas, and marketing.
- It is necessary to increase women’s research presence in organic research institutions (including at the higher levels). To enable women to conduct research in the field, women in some cultures may need support. This might include providing chaperones or enabling them to work close to their homes. It is important to allow women the ability to set research agendas, and to work with their research needs and priorities as opposed to meeting the needs of what outsiders deem important and worthy of research for their communities.
- Food security as a priority for organics may also involve enabling women’s empowerment since they hold, in most cultures, a central role in providing nutrition for the household.
- A shift away from the hegemonic norms that has hitherto characterised elements of the ‘western’ organics sector with regard to gender, agriculture and indigenous peoples will allow for a claiming of space where new and reclaimed gender roles and greater participation for women can be realised.

1.1. RECOMMENDATIONS

1.1.1. *Making an Active Choice for Gender Equality*

- Active choices have to be made for gender equality when working with partners. It is not enough to ensure that formal criteria are met, for example that women are members of committees or that separate washing and toilet facilities are provided. Attention needs to be paid to the strength of women's voice. Are women actually speaking in meetings? Are they taking decisions? Increasing women's agency will come when this is part of intentional project design, and when empowerment is a conscious part of an organisation's agenda.
- Capacity development needs to be based upon an analysis of the constraints women face in organic and sustainable farming. For example, if women are to be stronger decision makers in the field (not just the office) there needs to be specific training for women on machinery operation and maintenance. We cannot assume men and women enter organic and alternative farming with the same experience. We need to start looking at that as a barrier to equality on organic and alternative farms.
- Support for gender equality should not obscure the needs of the most poor, both men and women. Special organic initiatives can be developed to work with asset poor, even landless farmers. Widows and divorcees may form a special target group since they are the most likely to have no assets (including a lack of social capital and of land), but poor men should also be included.
- Diverse gender sensitive indicators, approaches and analyses appropriate to diverse situations and communities should be developed and used. These diverse approaches/solutions need to be shared amongst different global communities working towards increasing women's empowerment in organic farming and sustainable agriculture.

1.1.2. *Working Positively with Indigenous People*

- Any programme that seeks to effect the participation and empowerment of women through organic farming must work with the differing realities of indigenous women.
- Programmes to achieve women's empowerment in organic farming need to be culturally located and not impose colonial based ideologies and gender norms onto indigenous cultures.
- The empowerment of indigenous women in organic and sustainable farming sector must take into account the interrelatedness between biodiversity, local and indigenous knowledge and gender.

- Clear understandings and definitions of what constitutes indigenous and local needs to be understood and made explicit.
- The cultural values and assumptions that underpin any empowerment work with indigenous women need to be understood and accounted for. This provides a check and balance to ensure that western categories and understandings of empowerment are not being imposed over indigenous understandings of empowerment.
- Rebuilding fractured and fragmented indigenous and local knowledge is critical to the rebuilding of indigenous and local communities and their ability to participate in organic and sustainable farming.
- The securing of farmer's and indigenous communities rights on genetic materials is critical to the securing the on-going participation of indigenous and local peoples in organic and sustainable farming.

1.1.3. *Situation-Specific Interventions*

- In some situations women-only groups – that actively locate and involve the poorest women – will be appropriate. In other situations approaches that centre on empowering the whole family may be preferable. Other approaches may target women for capacity-building, but work to secure male support through emphasising role complementarity of women and men.
- The roles and economic contributions that women make should be understood and supported from the perspective of the natural, social and economic framework within which they live.
- When planning an intervention, agencies should consider the likely impact upon the gender division of labour – and the rights and responsibilities that flow from this. Only those interventions clearly able to increase the agency of women should be supported. Measures need to be taken to ensure that women are in fact empowered – both by ensuring male support and through capacity development.
- In some situations, organic farming is a **response** to ecological and social breakdown. It is an attempt to reconstruct agro-ecological systems that are failing to support their human populations. In such situations, conventional farming approaches have simplified not only agro-ecological webs and reduced their effectiveness. Human relationships in farming in such cases have often been reduced to those of farm owner and farm labourer. Household food security has become dependent on market forces that local people cannot control. In such situations, interventions need to be very carefully planned using participatory methodologies.

- Market-orientated organic farming should adopt a value chain approach for identifying specific interventions that support gender equity initiatives (see Annex 6).

1.1.4. Appropriate Market-Orientated Production

- Local plant and animal species need to be farmed that are suitable for the prevailing agro-ecological conditions. Catering for the likely effect of climate change is critical.
- Ensuring household food security is paramount; organic production that does not rest on certification should be promoted, particularly among poorer farmers.
- It must be understood that women often have *de facto* land rights that depend on relations with male kin. The policy of certifying land can backfire as it can consolidate formal male ownership over land. In such situations it is useful to explore approaches to certifying women's land, or to certifying non-land based products.
- To reduce risk, crops and animals that can be marketed locally as well as for export should be promoted.
- Women should be actively targeted by external partners interested in developing market opportunities. It should not be assumed that men 'automatically', or for 'cultural' reasons, are the best partners. Female extension agents may be appropriate in some locations.

1.2. CONTINUING RESEARCH NEEDS

- Most of the literature selected for the Literature Review discusses the complex interactions between gender identity and sustainable farm practices in North America and Europe; this is because there is a paucity of similar studies about women farmers in the South. We recommend that studies be conducted in the South about how farm women are challenging and contesting gendered spaces in farming, and in so doing working to redefine not only their gender identities, but also the meaning of sustainable farming itself.
- By the same token, more research needs to be conducted on how the interactions between sustainable farming and the ability of male farmers to express a range of masculinities may be mutually reinforcing.
- Our research shows that the way women learn in sustainable farming does not seem to be radically different to the way they might otherwise learn. Further research should be conducted on how extension agents in organic farming foster learning, and particularly into any gender biases that might be accruing.

- In this study, we have only touched upon the landless and the most poor in farming communities. These people may be involved in caring for livestock, as day labourers, or in the collection and sale of non-landbased products. We recommend that research be conducted into how to work with the asset-poor - among whom women are vastly over-represented - to promote organic and sustainable forms of farming and natural resource management, however microscopic in scale.
- We have not examined the work of women farm labourers on organic farms; this is significant research need.
- Another way that IFOAM can support an increase in women's empowerment is to undertake further research that provides a basis for profiling diverse communities, organisations and co-operatives that have specific policies similar to the Krisoker Saar from Bangladesh. This work could then provide models for other communities, organisations and co-operatives to use when addressing issues of structure relating to women's empowerment in organic farming. Multiple case studies would need to be undertaken to reach the diverse cultural contexts in which organic farming and women's empowerment is sought.
- Private sector research concentrates on internationally traded crops, but women tend to farm locally important crops such as sorghum, millet, and leafy vegetables. Publicly funded research on these crops and growing practices may be required to improve production and meet local (and increasingly urban) market demand for these crops. Efforts to conserve traditional varieties of these and other crops grown by women will maintain important knowledge and are essential for improving those crops. Policies on traditional varieties and food security now cover local crops important to women, including flower and handicraft crops.
- If women are to benefit from modern agricultural technologies, they need to participate in research and development. Participation will permit them to set their own priorities based on their appraisal of their needs. With respect to biotechnology, key research issues include developing a better understanding of the role of women as the guardians of traditional knowledge relevant to biotechnology applications, analysing which crops are affected by biotechnologies, and appreciating how the introduction of genetically modified crops may affect the local valuation of "women's" and "men's" crops.
- Participatory and decolonising methodologies should be adopted, where appropriate, to ensure that any research process undertaken in the area of women's empowerment and Organic Agriculture actually empowers the communities being researched. Research should contribute to building the capacity of the communities as researchers as well as building on the communities' understandings of women's empowerment. This research needs to be adequately resourced and allowed sufficient time.

- In line with decolonising and participatory methodologies communities should identify and construct the research questions to be explored regarding women's empowerment and organic farming. Different communities have differing needs and it is inappropriate for 'outsiders' to construct the questions based on their 'outsider' values and assumptions.
- The lack of gender-disaggregated data means that women's roles in organic farming – and consequently their opportunities and constraints - are poorly understood. Data on women-owned farms (number, acreage, types of crop grown, income etc) is urgently required.

2. **METHODOLOGIES, ASSUMPTIONS, EPISTEMOLOGIES**

2.1. **WOMEN'S EMPOWERMENT AND GENDER RELATIONSHIPS**

This report honors and privileges the diversity that exists amongst the case study participants in defining and engaging with the topic of women's empowerment and sustainable/ organic agriculture. It refrains from essentialising the concept of 'women's empowerment'. We emphasize that what is understood by the concept 'women's empowerment' by our case study participants and in our literature review has provided a great diversity in descriptions and ideas, which in turn will require diverse interventions and solutions. Box 1 discusses more specifically our understandings of agency and empowerment.

Box 1: Agency and Empowerment

Empowerment puts a name to the process of change in women's sense of self-confidence and ability to deal with the world, changes which can be seen on the ground. It is a fuzzy concept because feminists have used it in many ways. Feminist definitions of empowerment are constructed around a cluster of concepts such as power, capacity, rights, interests, choices and control.

Agency means the ability to define one's goals and act upon them. It can take many forms. In the positive sense of 'power to', it relates to people's capacity to define their own life choices and to pursue their own goals. To this can be added 'power with', meaning the capacity to augment power through collective action. In this study, it would be central to explore how participation in organic farming – both subsistence and commercial - empowers women to make 'meaningful choices' (choices that enable people to live the lives they want). Empowerment implies a process of discovering new ways to exercise choice, or new domains in which choice might be exercised.

In Maori culture we would refer to agency as tino rangatiratanga which is self-determination or sovereignty. This is basically the right of people to have choices in how they provide for themselves according to their own cultural paradigms. Agency is not fixed and there are different levels of agency in terms of our capacity to be able to identify, pursue and achieve basic needs.

Gender relationships are fundamental worldwide to the way farm work is organised, the way assets such as land, labour, seeds and machinery are managed, and to farm decision-making. Given this, the lack of adequate attention to gender issues within the sustainable farming movement is of concern. The revolutionary potential of sustainable approaches to farming to reshape our food systems, and the way humans interact with those systems, will not be realized unless there is a concerted effort by committed sustainable farmers and consumers to work towards gender equality. Indeed, the question addressed by this paper can be turned on its head.

As well as asking how participation in organic and sustainable farming can empower women, we can ask: How does the participation of women broaden and deepen the multiple goals of sustainable farming?

2.2. DEFINING ORGANIC FARMING

In this paper, we call upon the insights of practitioners and academics working not only in certified organic production¹, but in sustainable farming movements more generally. It is useful to conceptualise certified Organic Agriculture as a subset of organic agriculture, which in turn should be seen as a subset of sustainable agriculture. Many forms of traditional agricultural practice share features with all three (Hine, Pretty and Twarog, 2008).

IFOAM's definition of Organic Agriculture is:

Organic Agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic Agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved.

See: http://www.ifoam.org/growing_organic/definitions/doa/index.html for more details.

The IFOAM definition has been arrived at through a broad-based democratic process. Such discussion processes are complex and continuous, since settling upon a definition of organic is far from simple. Particular qualities need to be selected. These need to be interpreted and valued. Processes need to be devised by which these values can be maintained. European organic standards themselves are not 'givens'. They represent the outcome of decades of discussion and dissent. Von Weizsäcker (pers. comm. 01/01) explains how, in Germany, the concept of 'organic' remains contentious. Organic actors include Demeter, an organisation run according to Steiner principles, Naturland, consisting of people who have identified a market niche for organic produce and Bioland, who tend to be 'leftish farmers' of the 1960s/ 70s generation with an interest in international justice issues. Such organisations were not set up to establish control systems. Hence there is nothing 'natural' or given about organic.

Wettasinha (in Frost 2003) remarks that 'Organic Agriculture is not simply agriculture without chemicals. (It is) an ecologically sound, socially just, economically viable, and therefore sustainable form of agriculture. [It] strives to maintain the ecological balance in the farming system and to utilise the resource base in a sustainable manner, whilst paying keen attention to socio-economic aspects of production. Nutrient recycling, optimal use of available resources, diversification, site specificity are important ecological aspects of organic agriculture. Socio-economic aspects such as food security, fair trade, capacity building etc are no less

¹ This is a system whereby the production of certified organic products has been objectively assessed as conforming with precise organic production standards, usually by a third party certification body.

important. Thus, organic and other forms of sustainable agriculture are the site of multiple values; the realisation of these values is certain to be problematic and conflictual given the fact that trade-offs will have to be made between values, and given the great variety of actors in the process.

Holistic understandings of 'organic' and 'sustainable' compete with more limited interpretations of what 'organic' is (particularly as expressed in organic standards) and underpin moves to incorporate social justice agendas, including the present contribution. The multiple goals of sustainable agriculture are often contrasted favourably with conventional models of agriculture, seen as embodying mono-cultures, the use of inorganic chemicals, high use of fossil fuels, global markets, mechanisation and capital intensive production (Trauger 2004). Allen and Sachs (in Trauger 2004) say that **'sustainable agriculture must challenge, rather than reproduce, the conditions that led to non-sustainable agriculture in the first place'**, and that it must address the **'inequities, the exploitative relationships, and the dependencies that conventional agriculture has benefited from, but ignored'**.

At the same time, much debate in recent years has focused on the development trends within organic farming, which suggest that in many countries a number of certified organic farms display a range of practices closely resembling those on conventional farms. Does this compromise the ability of organic farming to implement ecologically sound farming practices and to fulfil expectations regarding its contribution to rural development? Darnhofer *et al.* (2009) argue that the debate must move beyond its focus on the bifurcation between artisanal and conventionalised organic actors if it is to better understand the complexity of organic farming and propose more reliable descriptors of conventionalisation processes.

McMahon (2002) contends that small scale farmers, whether certified organic or not, and those whose farming is oriented towards local markets may have far more interests in common with each other than there are common interests among that widely diverse category called organic farmers. Indeed, she considers that the homogenization of the term 'organic food and organic farming' has more to do with the priorities of marketing and distribution interests. Their ability to claim a premium price and capture a particular market segment lie, she says, in sharp product differentiation between organic and non-organic producers.

To summarise the discussion: it is not merely preferable, it is necessary and also healthy to see the conceptualisation and practice of Organic Agriculture as; contested, conflictual, disparate in character and an uneasy playing ground between ideology and practice. In recognising that women's voices, overall, are restricted to conversations on the margins of the organic movement, we acknowledge that some powerful women, such as Lady Eve Balfour (1899 – 1990), have been critical to shaping the organic movement, in her case in Britain. However, her words are used again and again to reiterate a unified narrative; in this paper we consider the disparate voices of ordinary women, both as individuals and as members of organised movements.

2.3. INDIGENOUS KNOWLEDGE AND ORGANIC FARMING

Although researchers have referred to the gendered nature of ecological and environmental science in most cultures, efforts to include indigenous peoples in sustainable agriculture have rarely been gender sensitive (Badri and Badri, 1994). **“Half or more of indigenous ecological science has been obscured by the prevailing invisibility of women, their work, their interests and especially their knowledge”** (Rocheleau, 1991). The marginalisation of indigenous women's skills, needs and knowledge in agriculture is directly related to the unequal power relations inherent within the ideologies of colonisation, capitalism and globalisation. As a consequence sustainable agriculture loses out (Awa 1989; Badri and Badri 1994, Rocheleau, 1991). This report emphasises and privileges the interconnections between indigenous knowledge, gender and organic agriculture, as we see these connections as critical when working towards women's empowerment and organic agriculture.

Indigenous women over the world have traditionally played a key role in biodiversity management and sustainable agriculture (Jiggins 1994; Shiva and Dankelman, 1992). Some indigenous women hold important roles in the preservation of biodiversity and specific forms of knowledge pertaining to biodiversity and sustainable agricultural practices. Typically, women hold specific knowledge about seeds and their selection, and vegetative propagation. For instance, in Quechua communities in Peru, the conservation and reproduction of different plant varieties, such as potatoes, is almost exclusively performed by women. Quechua women farmers are key decision makers, deciding which plant varieties meet specific nutritional needs, what crops to sell, and what crops to consume. However, the growing privatization and enclosure of land has circumscribed women's ability to plant “low-value” traditional crop varieties. Important sources of food and income for the household are being lost, along with knowledge of local plant varieties and their uses accrued by women over millennia (USAID 2006: see also Farnworth and Jiggins, 2006 on gender and participatory plant breeding).

The deep concern of some women for the health of the environment is closely connected to their perception as sustainers and nurturers of life, including their desire to raise healthy children. These concerns are embedded in their daily lives, experiences, interactions and perceptions of reality and are what Jiggins (1994) calls ‘distinctive knowledge’. Quiroz (1997) comments:

- Women's relation with, and perception of, their environment tends to be comprehensive and multi-dimensional, whereas men's knowledge (notably that of males involved in ‘western’ profit-oriented agricultural production) tends to be one-dimensional, focusing on narrow areas such as cultivation of a certain kind of high-yield, commercially profitable crop. This means that in the context of biodiversity, there are also differences with respect to the decisions taken. For example, when deciding which seed characteristics and varieties to preserve and what new combinations to search for, women tend to weigh a great many different complementary interrelated advantages (e.g. flavour and cooking time). On the other hand, male farmers who employ ‘modern methods’ and agricultural research scientists in general usually look for the ‘ideal’ genetic material for a more limited range of purposes, such as high yield and a good market price.

It is not our intention to generalise about local and indigenous women. We recognise not all indigenous women fulfil the roles discussed, particularly if they are urban-based indigenous women living outside, or displaced from, their tribal contexts. Nevertheless, for the purposes of our discussion, we note that some indigenous women hold important understandings and management roles with respect to biodiversity and sustainable agriculture. These roles need to be protected and made visible in any attempt to address women's empowerment in organic and sustainable agriculture. We also suggest that bringing the understandings of such women into the 'mainstream' discourse will support male and female farmers who wish to both deepen their work with agro-ecological systems, quite simply through helping to enrich and expand their understandings, and expand their 'gendered identities'.

We have actively sought to include studies from indigenous communities in the belief that IFOAM and similar organizations primarily located in the 'developed world' can learn much from the practices and traditions of indigenous communities. The deep knowledge of such communities about local agro-ecologies, and the multiplicities of ways in which they create, interpret and interact with these ecologies, enables empirically verified farming practices to underpin sustainable approaches to farming. Such knowledge also enables more values to be brought into discussions about 'sustainable and organic' farming. The relationship between indigenous peoples, in this case the aboriginal people of Arnhem Land, Australia and the land as the basis for indigenous knowledge is described by Michael Davis (1997) thus:

- The land, its features, environments and products form cultural landscapes, which are given significance by Indigenous belief systems. These cultural landscapes are both the result of, and provide the focus for, ancestral events. Together with indigenous peoples' social, political and religious systems, lands and environments are interwoven into a tightly integrated cultural system that derive their meaning from the Dreaming. This integrated system forms the basis for indigenous knowledge.

The construction of local and indigenous knowledge, and its means of verification, is markedly different from the construction and verification of western-based knowledge systems (see Box 2). The interpretation of this knowledge by non-indigenous peoples and those outside of the cultural context of where this knowledge is located raises a number of issues around power and the right to interpret, validate or dismiss (see Smith, 1999). A key issue for us as co-authors in this report working with indigenous knowledge is to ensure that the integrity of indigenous knowledge is upheld and that decolonising approaches to research and analysis are engaged. For this reason we have kept the case studies presented in Annex 1 as received (apart from light editing) so that our interpretations, cultural values and assumptions do not supersede the voices and realities of the respondents. This report is the first step in what we see as an urgent need for further work on understanding the interactions between the knowledge of indigenous women and organic agriculture.

Box 2: Local and Indigenous Knowledge

Increasing professional specialisation in the management of knowledge processes over the past few decades marginalized an appreciation of local and traditional knowledge, and of farmer-driven agricultural knowledge, science and technology (AKST) processes. The dominant AKST model, Transfer of Technology, assumed a linear flow of technological products and information. The underlying assumption was that farmers are relatively passive cognitive agents whose own knowledge is to be replaced and improved. The role of women farmers in local and traditional knowledge processes was even less valued and largely unexamined. Traditional ecological and cultural knowledges of indigenous peoples played a marginal role in the development of scientific ethics in countries where the social paradigm was dominated by Western science and economics (Altieri, 1989, Berkes and Folke, 1994, Glesissman et al. 1981). However, as multi-stakeholder approaches to agro-ecosystem management started to become more common, and as policy-making started to favour evidence-based procedures, place-based, user knowledge began to regain value in science governance.

Local and traditional knowledge generally refers to locally bounded knowledge that is site-specific and embedded in the culture, activities and cosmology of particular peoples. Interestingly, though, there are examples of local and traditional knowledge shared by communities in geographically distant areas – for example, some medicinal properties of barley are known to farmers in Nepal, Egypt, and the Andes. Local and indigenous knowledges can be seen as systematic bodies of knowledge that are tested through experience, through precise observation, and through informal experimentation. Indeed, like scientists, farmers belonging to an epistemological community engage in various forms of observation, measurement, experimentation, data collection and peer review. An important aspect of local and traditional knowledge is its evolving nature, yet the processes by which it evolves is rarely studied and documented.

Michael Davis (1997) defines the following as distinctive features that characterise local and indigenous knowledge:

- Collective rights and interests held by indigenous peoples in their knowledge,
- Close interdependence between knowledge, land, and other aspects of culture in indigenous societies,
- Oral transmission of knowledge in accordance with well understood cultural principles, and
- Rules on secrecy and sacredness that govern the management of knowledge.

Local and Indigenous Knowledge, Biodiversity and Sustainable Agriculture

Through a process of informal learning and adaptations, farmers, especially smallholders in the tropics, home to the world's greatest reserves of biodiversity, have developed a wide range of farming systems that are compatible with their ecological niches. The bio-diverse character of many such farming systems facilitates environmental sustainability through the provisioning of diverse ecological services (Di Falco and J.P. Chavas, 2006). They help to ensure the conservation of the diverse genetic pool of landraces needed for modern plant breeding (Brush 2000). Through agro-diversity, risks of complete agricultural failure are minimized and food security enhanced. However, indigenous knowledge and relationships with biodiversity and sustainable Organic Agriculture are threatened. The global decline in biodiversity has resulted in a loss of traditional food resources for indigenous peoples and is impacting on indigenous peoples relationships with the natural world and each other (King et al. 1996). Intensive agriculture has resulted in the drainage of wetlands, the clear felling of native forests, and the leakage of fertilisers, pesticides and other chemicals into waterways and onto land. The replacement of traditional crops with crops grown for the global markets - and more recently GM crops - is undermining biodiversity, the relationship of indigenous peoples to that biodiversity, and thus the ability to maintain sustainable agricultural practices and from thence the retention and use indigenous knowledge (Shiva, 2000). Indigenous communities are being locked into relationships with monopoly-driven multi-national seed companies that are forcing dependence on GM seed and chemical fertilisers.

Recently, a different threat has emerged to indigenous knowledge: bioprospecting. Bioprospecting is the practice of collecting and screening biological samples of plants, insects, animals, marine life and micro-organisms found in the wild or stored in botanical gardens, herbariums, and gene banks and then developing them commercially into biopharmaceutical or agricultural products for global markets (Posey, 1996). The threat is that bioprospecting will occur using knowledge that indigenous peoples have developed over generations of living in close association with the land but without the recognition or permission to use that information (Mead, 1997, Shiva, 1998, 2000). Given this, Box 3 outlines positive ways of working, as researchers, with local and indigenous knowledge in farming.

Further discussion of local and indigenous knowledge, including how to meet specific challenges relating to its preservation and development, is contained in Annex 4.

3. LITERATURE REVIEW

This section discusses some of the key themes emerging from a short literature review on women's involvement in organic and sustainable agriculture. Most of the literature selected discusses the situation of women in North America and Europe; this is because this area is particularly well researched. The case studies redress the balance by being global in scope. Nearly all are from the South. Nevertheless, there is a need to conduct ethnographic studies, similar to those presented here, in the South.

The aim of the literature review is to flag up themes to inform and enrich the case study findings. The first section examines gendered identities in farming, suggesting that conventional farming in the North is strongly identified with the expression of rural masculinities. One outcome is the creation of strongly male-gendered spaces, such as farm fairs, which are critical to knowledge production and exchange, yet to which women have almost no access. The gender division of labour is, unsurprisingly, relatively fixed in conventional farming models with the prevailing model of farmers and farm wives. Interestingly, mainstream models of the gender division of labour do not appear to have been significantly challenged by sustainable women farmers. Finally, the contribution of women scientists to organic research is shown to have diminished over the past sixty years, in tandem with the shaping of farming women into farmwives.

The second section shows how women in organic farming are challenging gendered identities in farming. It opens by examining how women farmers are contributing to the development of sustainable agriculture paradigms. Discussion then turns to the still poorly-understood ways in which men can express alternative masculinities in sustainable agriculture. The discussion concludes with considering how women-led farms are leading to a rewriting of economic trajectories.

3.1. GENDERED IDENTITIES IN FARMING

3.1.1. *Associations Between Rural Masculinities and Farming*¹

Chiappe and Flora (1998), in their North American study of the differences between conventional and sustainable farming, observe that male gender identity is strongly conflated with the role of the farmer in conventional farming. It is useful to consider *why* farming, in Europe as well as North America, is so strongly identified with masculinity, and the implications of this for women's agency, before turning to examine how the masculinity of farming is being contested by women in sustainable farming.

Trauger (2004) notes that, in the course of restructuring food systems in the North following the Second World War, women shifted from participating in work central to the economy of the farm to assuming roles similar to those of urban housewives. *'Farmwives'* were expected to work in an idealized family structure in which they maintained the quality of the domestic

1 The term 'masculinities' refers to ideas and practices that enable some men to achieve a hegemonic position. Masculinities and femininities are cultural constructs which are specific to a particular time and place and are constantly contested, reworked, and reinforced (Saugeres, 2002).

sphere for their working husbands, and participated in farm work as needed. Trauger (2004) argues that today, even when women do work on the farm - particularly in conventional farming, this work is not recognized on its own merits: women are considered not farmers but helpers. This finding is supported by our case study from Uruguay, below, according to which women in conventional farming describe themselves as 'collaborators', whereas women in organics call themselves 'farmers'.

Saugeres (2002) conducted ethnographic research in France that demonstrates that it is the **mechanization** of farming over the course of the twentieth century that has served to remove women from the fields. Most men interviewed in her study said that tractors and other agricultural machinery have simplified agricultural tasks; some called farming these days a 'piece of cake'. Whereas in the past women carried out arduous work in the fields, this is no longer necessary. Indeed, all respondents, both male and female, spoke of women's work as being 'over' because of mechanization. They saw this as a consequence of mechanization, **not** as a consequence of men taking over women's work. Since working on the land is considered central to being a farmer, excluding women from this now masculinized space has marginalized the work of women. It is interesting to consider that the development of mechanization **could** have enabled women to continue doing farm work but on the contrary, it served to exclude them because their work was **always** seen as secondary.

Because farming is constructed as masculine, farmers' discourses and practices come to legitimize the boundaries that represent this space as masculine. These boundaries are maintained through a discourse emphasizing physical strength and a natural aptitude for technology as the two main qualities that are essential for being a farmer. Saugeres argues that the discourse that women and men use to legitimize unequal gender relations in agriculture is not a conscious attempt to justify those ideologies. Rather, what people are doing is to construct '*a commonsense world which provides a consensus on the meaning of those practices*' (Saugeres 2002). A woman farmer in Cornwall, whose husband is too ill to work, describes how offers to help from local men are plentiful – only that they always offer to do the mechanical work whereas she would much prefer help with the 'mundane stuff'. She appreciates the sincerity of their offers to help and so does not mention her real needs, but says '*People do accept that woman can drive cars, don't they - so why not tractors?*' She adds that men like to think that women '*should not bother their pretty heads*' with anything mechanical².

The alienation of women from technology in farming can be found worldwide. Brandth notes that women are not found in the discourses surrounding mechanization, because '*certain technologies are designed by and for men, presented with a masculine knowledge and symbolism, to mark a male space ...*' (1995 in Trauger 2004) and Mulemwa (1999) points out that textbooks used in science and technology courses in Uganda '*usually show men and boys actively interacting with machinery, for example driving cars or mending a gadget, whereas women and girls may be portrayed cooking with traditional means. A typical picture of a farm shows women sowing seeds by hand and a man on a tractor. The unwritten message is that girls do not have technological or scientific potential*'. These remarks are supported by our case study findings, below.

² Discussion conducted by an author of this study.

3.1.2. Gendered Spaces and Knowledge Production and Exchange

In conventional farming communities, business transactions and knowledge about farming are conducted and exchanged within the public spaces peculiar to the agricultural community, such as equipment dealerships, farm shows, grain elevators, cattle markets etc. These spaces are generally male-dominated. Farm women often feel ignored, overlooked, not taken seriously and even cheated in these spaces. They are seen as 'farmwives' rather than true farmers, and as such not capable of producing and sharing valuable knowledge about farming. The strategies farm women adopt to achieve their goals in these male-dominated spaces include getting a trusted male friend to accompany them, or to negotiate a price on their behalf. Some send husbands if they are married. That is to say, women invisibilise themselves as farm women (Trauger, 2004).

Further discussion with the Cornish woman farmer mentioned above about a recently deceased woman who had farmed alone for decades revealed that, as the only child and with parents who had died young, she had fought for respect in male farming circles since she had no male intermediary to call upon. At her funeral conversation centred on how male farmers had always tried to outbid her at the cattle market, finding it 'shameful' to be outbid by a woman. At the same time she was acknowledged by them to be a fine farmer. This story suggests that male farmers find their masculinity 'threatened' by women who are active in male spaces; a finding supported by Saugeres (2002) who can offer similar accounts.

A recent North American study (Lohr and Park, 2008) on approaches to weeding shows that - perhaps because of these zones of real informational and decision-making exclusion, women farmers learn through 'information-seeking'. Men, however, learn through sharing their learning with other farmers. In other words their learning is more experiential. Given the fact that the farmers being studied were organic, the study suggests that approaches to learning in sustainable farming have not yet overcome the gendered constraints of the conventional sector (Box 4). Of course, the research presented is tentative in nature.

Other research shows that women social scientists in agricultural research institutions frequently decry the paternalistic attitude of technologically-oriented organisational cultures towards those represented as the beneficiaries of their technologies. One woman commented: 'Agricultural science is very conservative in the sense of viewing science as rational, objective, rigorous methodology ...and this knowledge is conveyed to others. A very engineering model of science, the very antithesis of which would be the notion of social constructivity of knowledge and reality. The idea that knowledge is to be 'taken' to the communities one works with and that such a process requires the social construction of reality...is so totally alien in this environment' (Farnworth et al. 2008a).

Further research should be conducted on how organic farming fosters learning, and how sympathetic these approaches are to social constructionist approaches.

Box 4: US Women Farmers Learn Through Information Seeking; Men Farmers Learn Through Shared or Observed Learning

A study based on data collected on male and female U.S organic farmers in a national survey by the Organic Farming Research Foundation shows that women account for 21% of all U.S. organic farmers but only 9% of all U.S. farmers. Women are much less likely than men to manage organic and conventional systems on the same farm (m=25%, f=14%) and they are far more likely to allocate land to vegetables and herbs (m=33%, f=47% per cent of acreage). They are likewise far less likely than men to devote land to field crops (m=44%, f=28% per cent of acreage). The average farm size, 40 acres, held by women is far less than the average farm size held by men, 149 acres. The average income difference in favour of men is \$85,000 (m=42% <\$15,000, f=70% <\$15,000).

The study demonstrates that neither the size of the organic farm operation, nor income differences, were significant determinants of the number of weed control practices chosen by men and women. Whilst women are equally concerned about weed problems they do not add more practices to address them, a response that is different from that observed for men. Male farmers have a proclivity to supplement mechanical tillage with crop rotations, cover cropping, and hand weeding methods when expanding their portfolios of practices. Female farmers follow a different pattern when considering additional weed control methods, with hand weeding, crop rotations, cover cropping, and mulching as the preferred techniques.

The percentage of acreage in vegetable crops favour these practices, but the factors that influenced women's decisions to add more weed control techniques had less to do with the crop than their education and frequency-weighted number of information contacts. Women seem to be selecting their portfolio based on knowledge-seeking, while men select their weed management strategies based on crop mix and organic farming experience. This suggests that men are passing along knowledge through shared or observed learning, while women conduct information-seeking to obtain the same information.

Source: Lohr and Park, 2008

3.1.3. The Gender Division of Labour

Just as the way women learn in sustainable farming does not seem to be radically different to the way they might otherwise learn, the gender division of labour prevailing on conventional farms does not appear to have been radically transformed in sustainable farming.

Women in sustainable farming in the North rarely apply inorganic fertilisers, or use heavy machinery. The respondents in Trauger's (2004) study, conducted in the US, showed that women farmers performed fieldwork - planting, cultivating and harvesting - by hand. Even on the farms where some work was mechanised, women were not likely use machinery, preferring to enrol male family members or to hire in men. Women were equally unlikely to apply inorganic chemicals. Other research indicates that some women would be interested in working with ma-

chinery, but that the chief barrier to them is that this work is not considered feminine, and above all, that it challenges male self-images (Saugeres, 2002).

3.1.4. The Contributions of Women Scientists to Organic Research

Although women who work on farms have received considerable research attention, little attention has been devoted to the role they have played as scientists in developing the Organic Agriculture paradigm(s). Inhetveen *et al.* (2003) consider this is partly due to the general lack of interest on the part of agricultural scientists in the sociology and history of knowledge. They argue that agricultural science is hard to define and classify since it is comprised of a conglomerate of diverse disciplines - the natural sciences, economics, applied sciences, and sociology. For this reason agricultural science, along with its specific cultural and historical background, has seldom been reflected in feminist critiques of the natural sciences. Another reason for the lack of recognition of women in organic farming is that they are doubly outside the mainstream: they are contributing to the development of an alternative farming paradigm and they are carrying out research, teaching and working in a male-dominated domain.

Interestingly, indicative research by Inhetveen *et al.* (2003) shows that women in the earlier part of the twentieth century were much more heavily involved in farming research than they are today. They hypothesise that the relatively unprofessionalised approach to teaching, researching and advising on organic farming prevailing at the time may have enabled 'non-qualified' women to participate. At that time, too, they consider it was probably much simpler for women, as farmers, to make organic research part and parcel of their 'household' work. To this analysis we may conjecture that, as women found themselves increasingly marginalized from fieldwork as the twentieth century progressed, their everyday interaction with agro-ecological systems - and thus the impetus for research - diminished.

Inhetveen *et al.* (2003) suggest that since the 1980s the increasing institutionalisation and professionalisation of organic agricultural research has resulted in research becoming even more masculinised. They point out that, for academic women in agricultural research, the glass ceiling still represents a significant barrier as it does in many other disciplines. Their figures show that although women and men scientists are found in relatively equal numbers below doctoral level very few women become professors or lead organic research institutes. Interviews with male and female scientists in agricultural research institutions around the world, conducted by Farnworth *et al.* (2008a), support this analysis. The research showed that women professionals often feel 'excluded' simply by virtue of their gender. They felt marginalised from positions of power and decision-making, particularly if they also happened to be social scientists in technologically-oriented agricultural research organizations. One interviewee said: *In this meeting, despite my repeated attempts to ask a question - I was waving my colourful scarf - the chair, male, did not call on me. [This shaped her belief that] "It doesn't matter how old or senior you are, you are still invisible"*.

Inhetveen *et al.* (2003) argue further that the roles that women play in wider society are likely reflect themselves in their scientific concepts. Yet their voices are much less heard than those

of men: in the second half of the twentieth century, only around one in seven papers in the two leading organic journals for German speakers were published by women.

In sum, women researchers have, over the past century, been increasingly excluded from organic and sustainable farming research. Research domains in organic farming are narrowed and restricted by the absence of women, thus reducing the potential for iterative, synergetic learning.

3.2. CHALLENGING GENDERED IDENTITIES THROUGH ORGANIC AND SUSTAINABLE FARMING

3.2.1. *The Contribution of Women Farmers to Defining Sustainable Agriculture Paradigms*

In North America, the alternative agriculture paradigm³ has been used to define and encourage more sustainable agricultural practice. However, according to Chiappe and Flora (1998) the paradigm has been largely defined by male movement leaders and generally reflects their gendered perspectives. Their research with women farmers in Minnesota found they validated the key elements of the paradigm as outlined by Beus and Dunlop (1990 in *ibid.*), these being independence, harmony with nature, decentralisation, community, diversity, and restraint - but added important hitherto nuances to each of these. The women respondents also added two more elements - quality family life and spirituality. Yet due to women's lack of voice, these elements do not yet form part of mainstream sustainable farming discourse, leaving them in an unacknowledged female slipstream. Box 5 presents some of the most significant findings of Chiappe and Flora's research for this study.

More research needs to be conducted on how women in the South are rewriting the paradigms of sustainable farming that meaningful *in situ*.

3.2.2. *Space for Alternative Masculinities*

Using the plural term 'masculinities' means that there are a range of relationally empowered masculinities, for example hegemonic, complicit, subordinate and marginalized masculinities (Saugeres 2002). Chiappe and Flora (1998) suggest that the very strength of the association of farming with male identity may make it more difficult for men to articulate the aspects of family life and spirituality that many women, according to their research, see as critical. For example, sustainable women farmers deliberately use machinery less often and attempt to work more closely with natural methods. Their practice is deviant not only from conventional agriculture, but also from how conventional male farmers express their identity. The lack of women's voice means that the mainstream alternative agriculture paradigm fails to capture important elements of why women are engaged in sustainable farming, and it also hinders the ability of men to express more nuanced identities.

3 The authors refer to sustainable agriculture rather than organic since they do not only consider certified organic farming.

More research needs to be conducted on how the interactions between sustainable farming and the ability of male farmers to express a range of masculinities may reinforce each other.

3.2.3. Economic Valuation of Sustainable Women Farms

The literature shows that women farmers in the North generally produce for specialised, local markets. In this they are capturing the *zeitgeist* with its concern around carbon footprints, the logic of lengthy food chains spanning continents, animal welfare issues related to transportation before slaughter to distant abattoirs, and strong levels of interest in farmers' markets. Work traditionally conducted by women, in particular caring for animals and growing food for family consumption, is now becoming economically valuable. Markets are opening up for free range poultry, organic eggs, vegetables, etc and also value added products such as jams, jellies and baked goods. The work to produce such goods is labour intensive, largely unmechanised, and does not involve the application of inorganic chemicals (Trauger, 2004).

Women are much more likely than men to operate smaller scale farms. They are not necessarily full-time farmers; policy makers and researchers should relinquish assumptions that only full time farming that provides all or most of a family's income counts as 'real farming'. Apart from failing to capture the modern realities of farming, such assumptions such seriously lessen farmers' political voice and hamper their participation in sustainable farming discourse.

Box 5: North American Farming Women's Perspectives on the Sustainable Agriculture Paradigm

Independence. Women focus more than men on expense reducing, rather than on income generating, activities. Many women seek self-sufficiency in the production and preservation of most of the food consumed in the family as well as in agricultural inputs, labour and finances. Whilst male farmers tend to focus on products, women often consider the complete food system, thus adding an on-farm value to the ideal of independence. In alternative agriculture, women's crafts become vital contributions to a more sustainable food system.

Women feel that independence from chemical companies, farm loans, and federal companies is key. Some women believe that small-scale farming is more sustainable since manual labour can be used. This reduces the need for investment in large equipment and the consumption of non-renewable resources. Small farms are thought of as a means of keeping the family on the farm, and ensuring physical interaction with nature (in itself a component of spirituality). Women aspired to self-sufficiency in farm labour as a way of achieving sustainability. To do this they tended to adjust farm work to what the family members can handle.

Community. The women consider that independence results from *interdependency* on community resources. They are interested in the securing the independence of the family unit, not themselves as individuals.

Decentralisation. The women emphasise the importance of making a local choice in consumption. Women's importance in family consumption and community maintenance is in keeping with the cultural construction of femininity in rural Minnesota. This decentralisation is reflected in the marketing practices of the households which the women often direct. Women often deliver food directly to customers or sell it at farmers markets.

Harmony with nature. Women highlight the temporal dimension more strongly than men do. Protecting the land for future generations is high on their list of priorities and a strong component of their alternative agriculture paradigm.

The new elements:

Quality family life through balanced production. Women push for practices such as rotational grazing and cover crops because these involve less labour and increase time with the family. They see alternative agriculture as a way of making not only their farms, but also their lives, more sustainable.

Spirituality. For the women, spirituality is strongly articulated - though this can be secular as well as religious in origin. The spirituality of being tied to land and family provides them with a sense of wholeness in their lives.

4. CASE STUDY DISCUSSION

The case studies prepared for this report are presented in Annex 1 in the respondents' own words. They are grouped geographically, in each case (bar North America and Europe) preceded by a short overview of the agricultural strengths of each region and women's typical farm work in each.

In this section we analyse and interpret the case studies under the following headings. The words of respondents, where cited, may be very lightly edited or summarised in the interests of clarity.

- 4.1 Women's Empowerment and Organic Agriculture: Agency
- 4.2 Women's Empowerment and Organic Agriculture: Structure
- 4.3 Women's Empowerment and Organic Agriculture: Relations
- 4.4 Market-orientated organic agriculture: The Impact on Women's Empowerment

4.1. WOMEN'S EMPOWERMENT AND ORGANIC FARMING: AGENCY

Agency is the ability to define one's goals and act upon them. It is the right of people to have choices in how they provide for themselves; to be self-determining. In the positive sense of 'power to', agency relates to people's capacity to define their own life choices and to pursue their own goals. To this can be added, 'power with', meaning the capacity to augment power through collective action, for example through membership of a co-operative.

Agency is closely linked to resources, for without resources it is often impossible to realise a goal. Women worldwide have much less access to, or control over, privately-held resources such as land, machinery, or money, than do men. It can be hard for women to raise collateral for investment. Their access to resources held in common may be restricted. In many countries around the world, for example, women are barred by custom from entering large water bodies and thus cannot fish – an important detail in areas where income-generation opportunities are few (Yawe, 2006). Lack of access to resources can seriously limit the ability of women to put their values into practice; improving the access of women (and disempowered men) to privately held resources, and to resources held in common, is thus fundamental to sustainable farming. Locally appropriate natural resource management strategies that are gender-inclusive and pro-poor are, of course, required.

At the same time, having more resources does not *automatically* mean having more agency, or voice. Chiappe and Flora (1998) argue that it is precisely *because* women are frequently located differently to men both in relation to resources, and to the needs of the family, that they may express different issues with respect to sustainable farming. For example, women may be more

reliant on common resources and thus urge their protection, or be responsible for household food security and thus be averse to devoting land entirely to cash crops.

Voicing - and listening to - these issues enables broader, deeper understandings of sustainable farming to develop. These understandings should be relevant to both men and women. On the one hand, they enable a wider range of gendered identities in farming to emerge and be legitimised. On the other hand, enriching the sustainability paradigm enables robust, more holistic farming practice. The Literature Review shows that sustainable women farmers have helped add value to localised food production through making and selling preserves, for example. Working with indigenous women helps develop a better understanding of local agro-ecological diversity and its uses. It also enables culturally specific understandings of agency to be understood and worked with in organic farming initiatives, as explained in Box 6.

Box 6: Culturally specific understandings of agency: Mana Wahine

We understand the term women's empowerment through the Maori concept of '*mana wahine*'; to translate this term would be to describe the process of enhancing the authority, power and prestige of Maori women. Mana wahine is located in a Maori cultural context; if you were to talk about women's empowerment to Maori communities you would be better placed to describe it as mana wahine. It must be emphasised that the empowerment of women or mana wahine occurs within the wider *whanau* - yhr family unit. Huia Jahnke (1998) describes mana wahine as "*the power of Maori women to resist, challenge, change or transform alienating spaces within systems of domination*". Mana wahine is a process of *tino rangatiratanga* (self-determination): these are practices and strategies that Maori women employ individually or collectively. Mana wahine acts as a *kura* (knowledge base) where Maori women's thoughts and theories become validated, thus giving visibility and space to the herstories, realities and aspirations of Maori women.

4.1.1. Case Study Findings with Respect to Agency

- The majority of case study respondents report that women's experiences in organic farming lead to an increase in agency. We quote from the case studies reporting an increase in agency as they are the success stories that should be held high with regard to the ability of Organic Agriculture to support the empowerment of women.
- Access to cash in an environment where cash poverty, and poverty of opportunity, are the way poverty 'looks' is the key factor in empowerment. Organics can create opportunities and also access to earned cash. Samoa case study.
- The more women participate in organic farming the more they get involved in decision-making events. They've increasingly gained more experience and skills, more self-esteem and empowerment. Uruguay case study.

- Women's participation in organic farming is leading to an increase in self-esteem. This in turn has an impact on women's empowerment. Maori women are also taking on leadership roles in organic agriculture, thus increasing their agency. Maori case study.
- The women I worked with on organic farms did have major decision-making power on the large scale, planning the farm strategy, marketing and otherwise. As far as day-to-day planting, managing workers, and field management goes women play more of a background role, staying in the office and on smaller farm jobs. Of course this varies depending on the size of the farm. Laura-Anne Minkoff, US study.
- Vanaja Ramprasad from the Green Foundation in Bangalore, India, reports an increase in women's ability to make decisions regarding village-based seedbanks:
- We have worked with women in sustaining the community seedbank concept to make local seeds available in the community and thereby the diversity that is needed for family food consumption. Women play an important role in maintaining kitchen gardens that are valuable for providing nutrition for the family.
- Vanaja Ramprasad describes the activity of the community seed banks as giving importance to women as managers, women as producers and women as supporters of organic farming. These roles all have agency attached to them and provide the women involved with experiences of being self-determining and of making choices.

4.1.2. **Barriers to Agency**

- Our respondents identified a number of barriers to increasing women's agency.
- Echoing the findings of the Literature Study, respondents noted that agricultural mechanisation is bypassing women. Mechanisation serves to reduce women's role to that of wage-earning labourer. Little or no effort is being made to develop tools suitable for women, or to train women in machinery operation and maintenance.
- Women suffer from a lack of adequate information regarding market chains and a lack of access and entry points to formal and export markets.
- In some countries, such as in parts of India and in Bangladesh "*deep rooted gender disparities and biases within the communities*" largely prevent women's participation in product fairs and markets.
- In Maori communities, some of the barriers to increasing women's participation in sustainable agriculture are the patriarchal structures and privileging that exists in tribal organisations; a lack of training opportunities for Maori women to progress in developing a careers in this area, and a lack of understanding markets and export opportunities.

- The Bangladeshi respondents regretted a lack of women-centred strategies, policies and subsequent implementation and monitoring from government to support women's empowerment objectives. This is no doubt a wide-spread problem.
- Overall lack of government support to smallholders. According to the Uruguayan respondents, the factors that prevent the development and implementation of a women's empowerment agenda are those that affect family farming in general. The national government offers little support for family farmer, let alone organic farming. Therefore, women organic farmers are as vulnerable as family producers in general. No specific impediments to implementing a women's empowerment agenda were identified by the interviewees.

As mentioned above, strengthening women's access to, and control over, productive assets such as; capital, land, knowledge and technologies is generally thought to provide enabling conditions for their empowerment. Through strengthened agency their decision-making role in community affairs and representation in local institutions is enhanced. Yet the relationship between agency and control over assets is complex. An Indian study, Box 7, reveals that although a project intervention succeeded in strengthening women's voice at the community level – the project increased their social capital - this did not translate into increased control over assets. The case study shows that tight reciprocal relationships between asset control and empowerment do not necessarily exist. Women may experience an increase in their decision-making power and mobility despite no change in their physical asset base.

It is valuable at this point to examine the findings of our organic and fair study since it also refutes simplistic associations. The study charges that, despite the great and laudable efforts of the Fair Trade movement to work towards women's equality, substantial deficits remain. *Formal* gender equality, as expressed in fair trade norms, is respected. But there is less awareness about

Box 8: Formal or Substantive Gender Equality?

The authors of the Solidaridad study, which focuses on organic and fair certified fruit production in West Africa and in Peru, note that Solidaridad maintains an unexamined assumption that women's involvement in fair trade automatically implies a strengthening of their position. It assumes that gender issues are dealt with because fair trade generates formal labour opportunities for women and Fair Trade Labelling Organisations International (FLO) regulations on gender are followed. However, in the producer organisations they studied women participate as part of the labour force but are not active decision-makers, even when they are members of committees. For example, the premium committee at one of the banana plantations studied has two women members, showing that the need for women's participation is formally recognized. Yet these women have little say in determining how the fair trade premiums are spent. They lack the assertiveness or power to express their views and to influence decision-making processes. It has not occurred to staff to stimulate and support women to play a more active role.

the need to work towards substantive gender equality¹ - the actual influence or control of women, and what they stand to gain or lose when decisions are made. This is discussed in Box 8.

4.1.3. Measures to Increase Agency

Some respondents are undertaking specific work to increase the agency of women in sustainable and organic agriculture.

- Working with women-only groups. One respondent, writing of her research on organic farming in Uganda, argues that women's empowerment can only be achieved through ensuring functioning women's groups. Part and parcel of this work is to actively motivate other local women to join the women's group – an activity undertaken by several respondents.
- Women's groups are effective in some situations, but not in others. For example, in Samoa, organic organisations work with the entire family to increase their agency. Critical to their success is the fact that women in Samoa are generally rather empowered and thus have a strong voice, including within the family.
- Respondents noted an important increase in women's agency at the community level where women are specifically encouraged to take on public roles, for example in maintaining seed banks and in taking on community leadership positions.
- Respondents describe how the economic benefits derived from participating in organic farming help provide more options to women and thereby increase their agency.

Box 7: A Cautionary Tale: Unclear Links Between Enhanced Social Capital and Control over Physical Assets

Farmer field schools (FFSs) were conducted in southern India to reduce pesticide input and enhance sustainability of cotton production systems. A complementary study was carried out to determine the additional benefits of FFSs in the social and economic arena, using the sustainable livelihoods concept to frame the evaluation. Farmers who had participated in the integrated pest management (IPM) FFSs perceived a range of impacts much beyond the adoption of IPM practices. The reduced cost of cultivation allowed for financial recovery from debt and the building of physical assets. IPMFFS households and production systems were perceived by the participants to have become more economically resilient than Non-IPMFFS control groups when faced with adversity.

1 Formal gender equality refers to the formal aspect of gender relations, e.g. the percentage of women members in a committee. Substantive gender equality refers to the factual balance of power, e.g. can women exercise real influence in a committee. Formal equality may help improve women's living conditions and contribute to substantive equality, or it may be a mere formality. However, women are truly empowered when there is substantive gender equality. The notion of substantive vs. formal gender equality is central in the international women's rights movement.

The IPMFFS sessions became a space for women to express their views outside the house walls, and an opportunity for them to participate in large farmers' gatherings and in official meetings with policy makers. It is clear that the project triggered in some women a process of self-realization of the social boundaries that had restricted them. They reported that attending the schools was an opportunity to gain recognition of their personal skills and abilities. For instance, three of the women interviewed decided to become farmer trainers at the end of the IPMFFS and at the time of the interview were already conducting their farmer-to-farmer schools in the neighbouring villages. Their current sense of self-fulfilment perhaps exaggerated their recollection of their more subordinate and circumscribed position prior to attending an IPMFFS.

Yet the study also revealed that both men and women agreed the increased household cash flows arising from the project translated into the purchase of new physical assets mostly for men. This raises the question of who benefits from improved household cash flows and whether the curriculum was effective in ensuring fair benefits for both genders.

Source: Manchini *et al.* 2006

In Uruguay, the organic farming organisation APODU has not explicitly sought women's empowerment. Their experience is that women have slowly but steadily increased their participation in top decision-making bodies particularly since 2002. Currently there are 2 women (and 3 men) in the Board of Directors; in the Open Board of Directors meetings around one quarter of the participants are women (4-6 women, around 15 men). However, in 2005, a project entitled "*Social organizations of urban and peri-urban agricultural producers: management models and innovative alliances for influencing public policy*"² was initiated. It specifically addresses women's empowerment issues: "*Another way of incorporating diversity is to foster female participation, for two reasons: equity and reality. Women are actively involved in many occurrences of the organization and/or the units of production; however, they don't have access to decision-making instances. Their access to these instances will contribute to include their vision in the organisation as a whole.*" The second phase of the project, which focuses on tomato processing, started in 2008 and involves 12 women and 2 men. To date this project has been very important to increasing women's self-esteem.

4.1.4. Men's Support for Increasing Women's Agency

Some case studies illustrate the ways in which men are supportive of increasing women's agency. In some locations men are teaching women different farming methods and encouraging their participation and up-skilling. In other locations men are involved in monitoring and supervising on-farm experiments. Respondents also report that through the organization of farmer co-operatives there is a deliberate attempt to bring women on board as decision makers, thus making visible their ability to take on the role of managers. Men who are members of

² Coordinated by IPES-Perú, funded by IDRC (Canadian Agency), with the participation of several agencies (ETC, CIEDUR), developed in 4 municipalities of South America and 3 in Europe.

these co-operatives understand this approach and support and endorse women's involvement. Generally it was reported that men support women when they see that women's involvement benefits the family as a whole.

4.1.5. Recommendations

1. Women specific-training programs are needed to build women's capacity to participate in organic and sustainable farming. Training needs to include the handling of machinery, as well as business skills, post-harvest processing etc.
2. Women are more likely to experience agency in organic farming when their participation is supported and endorsed, rather than controlled, by the men of the community. Efforts need to be made to bring local men into the empowerment process.
3. Frequently, external agencies are the source of gender bias. They need to take a step back to consider their own norms reflexively and consider who they seek out as partners. Are they making an active choice to work with women farmers?
4. Attention should be paid to achieving *substantive* women's equality. A tickbox approach, for example in counting the percentage of women in a committee, or the number of female toilets, is not sufficient and can indeed disguise a lack of women's agency. A positive and determined choice for women's empowerment needs to be made.

4.2. WOMEN'S EMPOWERMENT AND ORGANIC FARMING: STRUCTURE

Structure is about the political, cultural, economic and social structures within which Organic Agriculture operates. These structures are underpinned by values, assumptions and ideologies that perpetuate cultural norms. As such they cannot be objective. An analysis of situation-specific hegemonic ideologies and behaviours that may be impeding women's empowerment is required. Important from an indigenous perspective is that such structures do not perpetuate colonial worldviews and values. Rather, they need to see differing cultural worldviews and values as valid, and actively work with these values in the creation of programmes, organic standards *etc.*

Organic and sustainable farming has the potential to create new structures that actively work towards achieving women's empowerment and protecting the use of indigenous knowledge. This is a challenge for the organic movement, particularly certified organic, which is predominately driven and supported by political, cultural, economic and social structures that are located within western ideologies and practices.

Part of the challenge is to identify behaviour that is impeding women's empowerment in organic agriculture. This may include a dominance of western-based thinking with regard to women's empowerment and possible interventions. It is clear from the indigenous case study presented by Maori through *Te Waka Kai Ora* that culturally-based solutions - derived from Maori cultural

paradigms, and driven by Maori people - are the most effective in addressing issues of structure for Maori communities. Culturally appropriate solutions need to be created by communities at the local level to address issues of structure.

4.2.1. Case Study Findings

Krisoker Saar (Farmers' Voice) from Bangladesh has a specific gender policy with respect to structure. It aims to influence the community to ensure equal participation of women in all social strata. Their policy covers women and decision-making, women's rights, relationship-building and pay equity. The policy is directed at increasing women's agency. Specific strategies include:

- Prioritising the experiential wisdom and decision-making of women with respect to family health care, nutritional care of the family and children, and homestead garden/organic farming development;
- Initiating regular local level meetings with women to identify their particular needs and interests in order to help them gain more control over their natural resources in relation to farming and livestock rearing;
- Trying to increase their knowledge on specific personal rights, gender rights, civic rights, marriage and domestic violence. Trying to encourage them to gain an education;
- Taking initiatives to influence them to build linkages with local government institutions so that they can play an active role and also gain knowledge about different incentives, safety-net facilities and initiative of the government;
- Encourage equal wages for any waged work - be it agricultural farming labour or non-agricultural farming labour.

The Green Foundation in Bangalore notes that certified organic farming is still very new and so it is too soon to draw lessons with respect to influencing structure. Vanaja Ramprasad remarks that women and men are now being brought together under the participatory guarantee system (PGS). This process has just started and will take time to measure the results in terms of increasing agency and women's empowerment.

The majority of case study respondents chose *not* to respond to the questions that addressed issues of structure. We may draw two conclusions regarding this lack of engagement. Firstly, some respondents noted that their organizations are specifically set up to promote a 'women's empowerment' agenda. The issue of positioning women inside the organization is a moot point since the organizations are women's agricultural/social justice based organizations. Secondly, some organisations are primarily focused on sustainable and organic agriculture. In these organisations the issue of gender equity is not actively pursued and in some instances just happens - as is evident from the case study from Uruguay which states:

APODU hasn't developed a specific agenda to develop a more equitable environment between men and women although, according to Ivet's words, "*women's participation has come about*".

The Uruguayan experience seems to tell us that, in some cases, the men and women involved in organic farming find gender equality a 'non-issue' because they take women's equality for granted. Empowered women are not seen as deviant or threatening by people - both women and men - who are presumably already thinking 'outside the box'. The study also makes it clear that mutually reinforcing feedback is occurring: increased experience with organic farming flows into increased self-esteem, and from thence an increased willingness to get involved in decision-making bodies. Respondents felt encouraged by male colleagues to take on more responsibilities. By the same token, other women self-exclude themselves on the basis of lack of knowledge.

The Samoan case study, in a different way, reminds us likewise of how different communities frame questions in terms of their own histories and cultural norms. Their response in relation to issues of structure was that they:

Address organic farming in terms of indigenous knowledge and how they relate to new structures. Past practices are important to their understanding of organic farming.

4.2.2. Key Points

Our research and understanding of women's empowerment literature shows that addressing issues of structure is an essential part of the mix for achieving and supporting women's empowerment objectives in organic farming. However, before organisations and communities involved in organic farming can consider dealing with structural issues they must first be able to articulate what they mean by women's empowerment and to be clear about their objectives in this regard.

It is clear from some of our case studies that just getting substantive women's empowerment on the agenda is a difficult enough task, let alone moving forward to agreeing ways to achieve and seek women's empowerment through organic farming. Once women's empowerment is on the agenda and there is a shared understanding amongst the community, co-operative and/or household about these objectives, then specific gender policies, gender based analyses and approaches that address structure in terms of the political, cultural, economic and social frameworks that Organic Agriculture operates within can be developed and implemented.

One way that IFOAM can support an increase in women's empowerment with respect to structure is to undertake further research that provides a basis for profiling diverse communities, organisations and co-operatives that have specific policies similar to the Krisoker Saar from Bangladesh. This work could then provide models for other communities, organisations and co-operatives to use when addressing issues of structure relating to women's empowerment in organic farming. It is important that multiple case studies would need to be undertaken to reach the diverse culturally contexts in which organic farming and women's empowerment is sought.

Key Points

1. Organic farming has the potential to create new structures that counter hegemonic values and enable and support women's empowerment.
2. Interventions to increase women's empowerment within the political, economic, cultural and social structures within which organic farming operates must be culturally specific and not overlay western values, norms and understanding of women's empowerment.
3. We recommend modelling a diverse range of successful case studies, where structural changes have been put in place specifically to empower women.

4.3. WOMEN'S EMPOWERMENT AND ORGANIC FARMING: RELATIONAL

Relational describes the relationships inside our own communities and outside with external agencies as well as our ability to build, maintain and sustain community. In this study we are particularly interested in identifying how organic farming promotes more interdependent and accountable relationships between women and men and the key people and institutions they engage with in pursuit of their needs and rights.

Relational is quite different to structure. Structure is about the political, cultural, economic and social formations within which Organic Agriculture operates. Through examining structure we are provided with an opportunity to understand the values, assumptions and ideologies that perpetuate cultural norms embedded within these formations or structures.

In contrast, relational is about the *relationships* that people have both within their own communities and outside of their communities. By focusing on relational within this study we are able to explore whether the involvement of women in organic farming actually promotes interdependent and accountable relationships that contributes to the pursuit of women's rights and needs.

4.3.1. Case Study Findings: Relational

The majority of respondents did not answer questions pertaining to relational in as much depth as other parts of the questionnaire. However, a consistent and clear message with regard to relationships was that the social, cultural and political system (structure) that organic farming operates within continues to privilege and give priority to relationships with men over relationships with women. The Uruguayan study provides a stereotypical account, which is echoed by the Bangladeshi respondents:

In Uruguay, there has been a greater exposure and contact with other NGOs and international organic organizations, mainly from Brazil through an increase in Organic Agriculture activities. Men tend to be the ones involved in political negotiations with governmental institutions. Women haven't participated. For instance, negotiations

with the Ministry of Agriculture to approve the normative framework for the Participatory Certification System took about a year and were conducted by some of the male members of the Board.

Although there is a clear focus on women's empowerment objectives within the work of Krisoker Saar in Bangladesh, it is still primarily men who are chiefly targeted by external partners for discussion and capacity development.

The Sao Tomé and Príncipe study provides a different slant, suggesting that external agencies like IFAD find it very difficult to find women partners to work with:

One of the main obstacles we are confronted with is that the agricultural producer cooperative culture is very male-dominated. When forms of collective action are "informal", i.e. women's groups, we find a lot of women, including in key positions (chairperson, treasurer, *etc.*). However, this is not so in formal cooperatives, especially the ones that export organic agricultural commodities.

At the same time civil society attention to a women's empowerment agenda is enabling change. According to Krisoker Saar:

In conventional Government policy and practices, the stereotyped social, cultural and political system always give priority to the male counterparts rather than female. But the changing contemporary development discourse is at present prioritising women's agendas in programme implementing strategies. Hence, nowadays in the context of Bangladesh women are becoming the target audience for participation, income generation and capacity development activities. As a result, women's social, economical and political inclusion is increasing and women are gaining more control over their lives and livelihoods.

Another aspect of relational has to do with who is considered knowledgeable about farming. In many instances, men are frequently viewed as 'progressive' farmers and are thus targeted as potential partners. However, women and men tend to have gender-specific knowledge on particular crops and their associated ecosystems (Farnworth and Jiggins, 2006; Charlier *et al.* 2000).

Furthermore, it is frequently assumed that export crops are primarily men's responsibility, leading to a belief that the product is controlled by a male household head. If the men receive payment from the buyer/ exporter direct then women may lose out. Although family members may cooperate to bring income into a household, we cannot assume that this income is divided according to the contribution of each person. Women in particular often lose out (Sen, 1990).

The poverty dimension should not be obscured by a single focus on gender relations. For example, poorer people in a community often do not belong to farmers' clubs because the expectations and requirements of membership can be too high. The explicit and hidden costs of membership can include fees, the need to provide food if members visit a farm, and the shame

of poor clothing. A choice to work with organized groups may exclude on the grounds of poverty and gender, for example in areas where women working without male help are among the poorest members of society. External agents may not realize, even, that these people exist (Farnworth and Jiggins, 2006).

Returning to the case studies, there is a shared understanding among respondents that the ideology of Organic Agriculture requires not only knowledge and understanding of natural cycles and relations, but also the co-operation of people in civil society. The case studies focused on the qualities of relationships that they see as very important to organic farming such as respect, co-operation and ethics. Working together and putting these strengths together enable women to pursue a more 'successful life'.

4.3.2. Recommendations and Key Points

Some organisations are trying to create interdependent and accountable relationships at different levels with different institutions. It was noted in the case studies that relationships begin at the family level and then move out to the community level. Krisoker Saar in Bangladesh are engaged in specific activities aimed to bridge the gap between policy makers, researchers, field workers and marginalised women of the community. The *defined purpose* of bridging the gap is to encourage and support interdependent and accountable relationships. Furthermore, in order to support women in relationship-building Krisoker Saar also works to translate the existing laws and strategies that promote and encourage women's equal participation and empowerment into local dialect so that women at the grassroots become knowledgeable and are enabled to identify, practice and access their rights.

Key Points

- Male farmers continue to be privileged in terms of having relationships within the 'structures' of organic farming and are treated as decision makers and spokespeople by external agencies.
- Men sometimes dominate producer cooperatives set up for export, thus making it hard for external agencies to find women partners.
- Respondents argued that organic is as much about quality relationships as it is about understanding and working with natural systems.

4.4. MARKET-ORIENTATED ORGANIC AGRICULTURE: THE IMPACT ON WOMEN'S EMPOWERMENT

Women increasingly supply national and international markets with traditional and high-value produce (both conventional and organic/fair), but compared to men, women farmers and entrepreneurs face a number of disadvantages, including lower mobility, less access to training, less access to market information, and less access to productive resources. Women often hold

distinct rights and obligations within the household, and they often perform distinct functions with regard to market activities. These circumstances affect their ability vis-à-vis men to take up opportunities, to invest, and to take risks. Most women farmers are smallholders who cultivate traditional food crops for subsistence and sale, whereas men are more likely to own medium to large commercial farms and are better able to capitalize on the expansion of agricultural tradable goods.

Evidence suggests that women tend to lose income and control as a product moves from the farm to the market (Gurung 2007). Women farmers frequently find it hard to maintain a profitable market niche. Men may take over production and marketing - even of traditional "women's crops" - when it becomes financially lucrative to do so. Women-owned businesses face many more constraints and receive far fewer services and support than those owned by men (Ellis, Mauel, and Blackden 2006; Bardasi, Blackden, and Guzman 2007; World Bank 2007a, 2007b). These disadvantages reduce women's effectiveness as actors in value chains and reduce overall market effectiveness. One study shows that providing women entrepreneurs with the same inputs and education as men in Burkina Faso, Kenya, and Tanzania could increase their output and incomes by an estimated 10–20 percent (World Bank 2005). Apart from efficiency gains, food security and welfare gains are also strongly linked to the provision of greater economic opportunities for women. Studies show that resources and incomes controlled by women are more likely to be used to improve family food consumption and welfare, reduce child malnutrition, and increase the overall well-being of the family (FAO 2006)³. The impact evaluation of an IFAD-GTZ project in Honduras and Guatemala, entitled "Organic agriculture to alleviate poverty among smallholders" concluded that:

"Overall, the Project contributed to i) develop innovative training and capacity-building methods in organic agriculture; ii) strengthen the organizational and technical capacities of farmers; iii) create a national platform for fostering organic agriculture in the country iv) provide linkages with national and international markets. The project benefited 3000 families. In both countries the project prioritized marginalized groups with high illiteracy rates, indigenous ethnic groups and women head of the households. Organic production promotes diversification and integrated production systems, including vegetables production, livestock raising as well as processing and transformation. This creates the condition for a more gender equitable participation in productive activities as women play a key role in managing small animals as well as in processing (dairy products and fruits) and packaging. The generation of new economic opportunities for women has resulted in women's increased self-esteem and the recognition of their role in rural societies. This has also contributed to increase the gender awareness of the majority of male members in producer organizations. ... organic production can directly contribute to achieve 4 out of the 8 millennium development goals, namely: anti-poverty, food security, gender equity, natural resource and biodiversity conservation." (Muschler 2004)

Agricultural and market development cannot be truly pro-poor without explicitly incorporating gender issues. The question addressed in this section is whether moves to commercialise organic production has adequately done so.

³ This introduction is taken from Farnworth, C.R. (2008) 'Module 5: Gender and Agricultural Markets' in Gender in Agriculture Sourcebook. World Bank.

4.4.1. Case Study Findings: Market-Orientated Organic Agriculture

Gender Division of Labour

It is essential to understand how the commercialization of small-scale organic farming activities affects the gender division of labour and in turn influences resource management, income flows, expenditure patterns, food security, nutritional security, and gender relationships (AGSF 2005). In our case study of organic and fair mango production and marketing in Burkina Faso, for example, the shift from local to export marketing has created new employment opportunities for women at the packing station. However, other women appear to have lost due to reduced marketing opportunities. Mangoes that women used to sell locally are now marketed internationally, but the role of women in the international marketing chain is much smaller than in the local market. The authors of our study ask: *Which* women, and *which* men, gain or lose from the changing divisions of labour associated with the shift from local to export marketing? What are likely future developments? What is needed to compensate for any adverse effects on gender relations? These questions have not been addressed by the project or its partners.

In Uruguay, organic women producers define themselves as ‘farmers’. This is very uncommon among conventional women farmers, who generally define themselves as ‘collaborators’. Organic women farmers are mostly involved in herb production - both medicinal and aromatic, cheese making, and in the preservation of fruits and vegetables. Vegetable growing itself is a largely male activity, with 7 out of 10 male organic farmers producing vegetables. In horticulture, women are mostly involved in packing. It is interesting to note that parts of this study echo the findings of the Literature Survey (which largely examined the Northern experience), in particular the fact that organic women consider themselves farmers, and, as with NAE farmers, they are marketing products traditionally produced in the household as part of women’s ‘reproductive work’.

A contrasting experience, again, comes from Samoa. The local organic organisation, WIBDI, works with families rather than just women to help them to work through changes in the gender division of labour. Women are earning cash in many instances; men are taking on hitherto female roles. WIBDI associates the success of their family, rather than women-targeted, organic programme with the fact that Samoan women are already rather empowered, unlike in other Pacific cultures, and thus have a voice in the family. WIBDI is nevertheless acutely conscious of women’s empowerment issues. The organisation provides training support to the families to farm organically and addresses issues as they arise, particularly with regard to women and men taking on non-traditional roles. They comment, *‘Empowerment for women begins when the men begin to see the value of their work and its contribution to the families’ livelihoods, and work with the women towards the same goals rather than insisting that the women take on additional roles to those they already have.’*

Marketing

Norman Messer notes in his presentation of the Sao Tomé and Príncipe study that *‘just like in conventional farming, if the crops involved are crops produced, harvested, processed, and/or sold*

by women, and the revenues thus earned belong to them alone and they do not need to share them with their husbands, then this can surely be very empowering for them, as it will also have an impact on their social status and their involvement in community-level affairs'.

Krisoker Saar from Bangladesh argue that commercialised organic farming harms household food security and lessens women's access to assets such as land and machinery. As such, their findings accord with some findings on a global level that associate market-orientated farming (whether conventional or not) with a decrease in women's agency. For example, a study in Ghana to map the consequences of small-scale commercialization found that the introduction of cash crops weakened the traditional gender division of intrahousehold rights and obligations, that the gender-based division of labour broke down, and that farm women increasingly undertook tasks previously done by men (AGSF 2005).

The Samoan experience provides an interesting contrast here. WIBDI have noticed changes in women's access to, and control over, resources as a consequence of shifting to market-orientated organic farming from a subsistence-based farming system. These changes include a greater diversity of food, and the fact that women are taking on more leadership roles in the community.

Food Security

Achieving food security is a major issue for women and women's enterprises since food security is generally women's responsibility. If market liberalization occurs when a large section of the population lacks access to enough food to guarantee a minimally sufficient diet, only producers of high-value cash crops may gain. In particular, production for export may threaten women's ability to farm enough land for subsistence production. If women are relatively more involved in subsistence production and men are more involved with cash crops, or if women lose their title to land as it is converted from traditional to modern cash crops, household food security may decline despite a rise in income (IFAD 2007a). A Ugandan organic study showed that *'for the rural poor, survival depends on food self-sufficiency, and that a monetized life-style is foreign. In this situation, if smallholders are to diversify and specialize, they must be able to trust the markets'* (Kasente *et al.* 2000). In buyer-driven chains, however, the market is not always guaranteed.

Landless and near-landless people who must purchase food may suffer from its reduced availability and higher prices. Work conducted by one author of this report in the Sunderbans region of West Bengal showed that over one third of the population was landless; they paid for food on credit (thus paying more) and on many days they went hungry. Working opportunities are restricted to certain points in the agricultural year. Women labourers are paid significantly less than men.

Vanaja Ramprasad notes that in rainfed farming areas such as that prevailing in Bangalore, production can be very uncertain. It is therefore not possible to make a sensible distinction between commercial and subsistence farming in this situation. Rather, the 'slogan is from subsistence to surplus'; the main focus of the Green Foundation's work is to ensure food security through organic farming. She adds, *'Field realities cannot be boxed into neat data that can be*

analysed. Globalisation has hit markets and rural livelihoods to such an extent that government, policy makers and NGOs have to invest resources to build the communities, soil and the genetic resources that are fast disappearing. It is like a bottomless pit ... In this effort organic farming, and empowering women to ensure the food security of their families, comes in as a streak of hope and light.'

Women-Centred Organic Production for the Market

The author of the Ugandan case study, Christina Ehgartner, comments that, *'there is always a risk for smallholder farmers if they produce for a commercial market and even more for a global market. In my case study most farmers reported that some years ago they had invested a lot of their time, money and land into the production of vanilla and coffee, because it was said that these were the crops with a high demand. After a while demand decreased and farmers found it not worth harvesting the crops. The women's project selected ginger and beans to be grown for export. The women had the big hope that if the ginger production worked out they would get a lot of money. However, ginger is not really used locally, although beans can always be sold on the local market or eaten by the families. I think it would be more secure if what is already produced locally is just produced in higher quantities for local or export sale; if there is no market then people can at least still eat the crop themselves or sell on local markets.'*

Vanaja Ramprasad, in common with some of the authors noted in the Literature Review, argues that organic farming risks becoming a marketing strategy more than a holistic attempt to address the needs of poor, marginalised people. It is *'being hijacked by vested interests and corporate sectors. The emphasis is more on packaging, advertising and organising trade fairs'*. This is not the place to discuss the pros and cons of 'growing the market for certified organic production', but it is useful to consider whether certified production is leading to a reductionist approach. In particular, it is likely that asset-poor farmers, of which there are millions around the world – and within which women are strongly represented – are unlikely ever to meet the requirements for certified production.

Norman Messer notes that *'one of the main constraints to the empowerment of women in Western and Central Africa is control over land. In agricultural societies where women have their separate plots - because they married into a village and were temporarily assigned such land by their husbands by way of customary authorities - these plots are typically allocated to household staple food production. Surpluses are not marketed, but are stored in the wife's own granary. Given that one of the problems for women with Organic Agriculture is the fact that land is certified, theoretically it should be possible, at least in the case of food secure communities, to convert these women-controlled plots into plots fit for organic farming for the export of commodities (but I do not know of projects that promote this type of approach). Alternatively, organic commodities that are not "land-based", such as honey, tree crops, etc. may be easier to tackle as women are generally in charge of collecting honey, wild fruits, etc., from community-owned land and have access rights to these commodities'*.

Constraints on women's mobility in some cultures strongly determines their relationship to the market, whether production is organic or not. Such constraints are explored in Box 9.

Box 9: Mobility Constraints upon Women's Access to Markets

In Bangladesh, men are at liberty to travel as far as Dhaka from outlying regions in pursuit of a livelihood, for example middlemen travel constantly in pursuit of farmgate sales in various villages and from thence undertake lengthy journeys to the capital. In contrast, rural women generally pursue strategies with a strong geographic focus, with the main locus being the household. Such strategies include the maintenance of a few dairy cows, goats, poultry keeping, vegetable gardens and embroidery, all of which, if they remain microscopic in scope, are manageable in a working day.

Very few women have access to key productive assets in their own right, most notably land. Widows and divorcees feature highly among the most poor since they lack the male intermediaries required for access to productive assets and market transactions. Homestead-based activities that do not require land represent a constructive way of working with women's limitations within prevailing norms; awareness-raising activities on women's legal rights regarding inheritance, and strengthening women's leasing rights to common property or natural resources can help to challenge those norms.

Women are responsible for all household tasks, including childcare and food preparation. Given the low level of technology such tasks are time-consuming and reduce the absolute time available for income-generation. Supporting women through the provision of labour-saving devices such as improved cookstoves, biogas digesters etc. will enable women to devote more time to income generation activities, as well as to leisure.

Small livestock and vegetables are commonly regarded as women's assets. Projects focusing on these will not have to contend with legitimacy or challenging women's gender roles, but may find difficulties in up-scaling. For example, restrictions on women's mobility beyond the surroundings of the home tend to reduce the absolute number of large livestock - such as cattle - that they can handle to an average of 1-3. Small enterprises located close to the house, or linking enterprises owned by several women, may suit women better. Promoting short value chains may help to concentrate knowledge and money among women in a particular locale, thus improving value chain governance. Establishing value addition facilities locally, for example in processing of fruit and vegetables, or sweetmaking units using milk produced at home, can help generate more income.

Women as actors at other nodes in value chain

As mentioned, women are constrained by social norms that restrict their movement into 'male' spaces. These spaces include virtually all vending and purchasing activities that take place in village markets. Women who do enter the market are stigmatised as destitute or as 'bad women' – a study prepared by CARE shows that widows, divorcees and with disabled husbands form the majority of those that brave the taunts of male vendors and customers. The few women that engage in trade typically sell jewellery and clothing from within shuttered shops, rather than agricultural produce. The net effect is to deny women engaged in agricultural value chains the gains of value addition that comes from forward market linkages.

Source: Farnworth (2008b)

4.4.2. Key Points: Market-Orientated Organic Production

- Particularly for poor people, the lines between subsistence and commercialised production are blurred. In such situations it is preferable to think in terms of surpluses that can be marketed once household food needs have been met.
- Certified organic production for the market is irrelevant in situations where food security is hard to achieve.
- Organic is better understood as an entire systems approach that works to restore soils, biodiversity and communities.
- Making organic 'corporate' runs the risk of making it part of the problem – the problem of disempowering the very people it seeks to work with.
- Every intervention must take into account local norms. Creative, novel approaches are needed to empower women in some countries to take part in certified organic production. This may mean certifying women's *de facto* land as organic, or it may require a focus on non-land based commodities. It is important to note that it may not be in women's interest to measure success in terms of business size – successful businesses may be taken over by men, or women may wish to restrict their businesses in order to fulfil their other social roles successfully.
- A value chain approach is suggested. The rationale is described in Annex 6

ANNEX 1

PRESENTATION OF CASE STUDIES

This report presents the case studies specially prepared for this report. We have opted to present them using the contributors' own words. They have, however, been lightly edited to remove spelling mistakes, abbreviations and the original question that stimulated the response. Case studies are grouped according to geographical region. The case studies from ESAP (East and South Asia and the Pacific), LAC (Latin America and Caribbean) and SSA (Sub-Saharan Africa) are preceded by brief remarks on the role of women in the typical agricultural production in each region. The purpose is to situate the case studies in their regional context.

A. EAST AND SOUTH ASIA AND THE PACIFIC (ESAP)

The great agro-climatic diversity of East and South Asia and the Pacific - ranging from fertile irrigated tracts to rainfed cultivation, mountain cultivation, and coastal ecosystems - is one of its greatest assets. This diversity has fostered the development of indigenous species of regional interest, permits the production of almost any crop species, and has resulted in a very rich dietary diversity (USAID 2005). Although much of the region suffers from poor market distribution, domestic markets generally are growing strongly. Several countries, such as China, India, and Thailand, already have mature agro-processing industries, and there are good opportunities to supply processed and other value-added products to domestic and international markets. However, in Indochina, where countries remain in the early stages of moving from a centrally planned to a market-oriented economy, businesswomen generally lack entrepreneurial skills and also have much less access than men to good quality equipment and technology that might facilitate value-added activities (UNESCAP 1999).

Producers in the small island economies of the Pacific find it particularly difficult to compete with developed country enterprises (as in New Zealand and Australia) and with the large developing country producers of the region. The previous emphasis on cash crops grown by men, such as sugar and sandalwood, has resulted not only in a collapse of livelihoods as global markets have weakened but also in a shortage of the traditional products normally grown by women - which are now in high demand owing to tourism and the development of the export sector. Until recently, no analytical work had been performed to capture women's work in farming, fishing, and natural resource management, resulting in a lack of attention from policy makers. Today, however, the pivotal role of Pacific Island women in ensuring rural livelihoods and food security is better understood and recognized (Booth 1999)¹.

1 Taken from Farnworth, C.R. (2008) 'Module 5: Gender and Agricultural Markets' in Gender in Agriculture Sourcebook. World Bank.

ESAP Case Study 1: The Green Foundation, Bangalore, India

AUTHOR: VANAJA RAMPRASAD

The Green Foundation is located in Bangalore, and is involved in subsistence and dryland farming. Its vision is to restore the food and nutrition security of small and marginal farmers. The organisation has a multifaceted approach and has placed women at the central stage since women play a crucial role in providing the food basket. The core activity of the organisation revolves around community seed banks managed by women. It defines itself as being 'organic by and large by default'.

The key crops are finger millet and dry land/upland rice as well as some irrigated rice. It does not have an intentional focus on commercialised organic production and works with participatory guarantee systems (PGS). The Green Foundation sells into local markets and is primarily involved in training, facilitating and organising farmer's groups. The main focus is on conservation of agriocultural biodiversity which is facing the threat of extinction as well as bringing economic benefits to farmers engaged in organic cultivation through PGS through enhancing access to the market.

The Green Foundation see women's empowerment as critical to the food security of the household. In the rural context unless women are empowered the choice of what is grown in subsistence farming that provides for the family's food basket gets narrowed down. Furthermore, they see that organic farming in the subsistence context plays a critical role in reducing the inputs from external sources, in particular inputs such as farmyard manure and work to do with seeds such as seed selection, the storing of seeds for the next season are in the domain of women's responsibilities. Every stage of plant growth - starting with that of selection of seeds for sowing to understanding the rainfall patterns, weather conditions up to the stage of harvesting - needs extraordinary skills, patience and wisdom that comes out of years of observation and involvement in the work demonstrated by women.

The coming of new technologies and the green revolution focused on high yield and hybrid seeds. Women were disempowered in making decisions as to what should go into the family's food basket. There is a close link between organic ways of food production and women's role in it. This is well explained by the fact that technical change in agriculture associated with high capital intensive inputs, depending upon mechanized production and post harvest operations have focused on men and the introduction of high response varieties suited to the market conditions have excluded women's knowledge, skills and productive contributions. As long as corporate interests take over and as long as small farms are considered not viable the role of small farms and the empowerment of women will be undermined.

Agency

With regard to decision making and agency pertaining to women and organic/sustainable agriculture the Green Foundation has worked with women in sustaining the community seed bank concept to make local seeds available in the community and thereby the diversity that is needed for family food consumption. They believe that women play an important role in maintaining

kitchen gardens that are valuable for providing the nutrition for the family. However, they also comment on the barriers to agency for women being the deep rooted gender disparities and biases within communities. The cultural practices of giving women the space for taking decisions have been eroded over time. When mechanisation came in women's roles were reduced to that of wage-earning labour. However, awareness about including women in training and capacity building is increasing with insistence of gender sensitive policies being implemented, at various levels, However, it is a slow process given the poverty and illeracy situation.

Women take an active role in maintaining the seed banks and this concept has spread in different parts of the state through networks. There are limitations as explained below. Through organic cultivation and value addition women are able to have access to the market. But they have the great disadvantage of the formal markets that operate on economies of scale and it is a very great disadvantage for them to compete in the market

The revival of organic farming in a formal way (though has been there by default) and facilitating access to it is at its nascent stages. Various NGOs attempting to integrate the communities into the larger market are spread across the state. Unless there is a niche product, like skilled handicrafts, women have not had easy access to markets. It is by organising them into a co-operative that there are attempts to strengthen their voice. In organising the farmers into co-operatives there is a deliberate attempt to bring women on board as decision makers and make visible their ability to take the role of managers. Men who are part of the co-operatives do understand the role given to women. Both women and men are brought together under the participatory guarantee systems (PGS) , this process has just started and will take time to measure the results in terms of increasing agency and women's empowerment.

Discussion of Subsistence Farming and Commercialised Organic Systems

It is difficult to differentiate between commercialized Organic Agriculture and subsistence farming. It is an artificially made construct to divide the involvement of women and men in organic agriculture. In reality, with many uncertainties that impact rainfed farming, it is not possible to make a distinction between commercial and subsistence. The main focus of the work is to ensure food security through organic farming and only the surplus to the market. So the slogan is from subsistence to surplus and not commercial.

The field realities cannot be boxed into neat data that can be analysed. Globalisation has hit markets and rural livelihoods to such an extent that government, policy makers and NGOs have to invest resources to build the communities, soil the genetic resources that are fast disappearing. It is like a bottomless pit that requires enormous effort to rebuild the society. In this effort organic farming and empowering women to ensure food security of their families comes in as a streak of hope and light. Organic production for self consumption and a marginal local market does not need certification.

Taking of control over resources, land, is the main resource for these small and marginal farmers. Even that is getting out of their hands thanks to entry of corporates hand-in-glove with

the political system that has done very little to better their lives. Hence I feel the pointed questions are redundant.

I am sharing with you the reality of what we are seeing today. Organic farming is being hijacked by the vested interests and corporate sectors. The emphasis is more on packaging, advertising and organising trade fairs. Unless serious concerns of the poor and marginalised are addressed it will end in a polemic.

We are just launching into some small scale vegetable production. This idea is just taking off since there was a market link that was available to us. Once this takes off the questions you are asking may become relevant. At this stage the effort is to:

- help the small and marginal farmers by organising them into a federation
- facilitate the capital formation with improved soil fertility
- focus on increasing production from subsistence to surplus
- facilitate the market access by linking with established market links who would collect the produce from the farm gate

Till all the above is well organised we cannot differentiate between subsistence and commercial.

The Green Foundation has identified further research and case study work as being needed in the following areas:

1. Loss of indigenous knowledge and resources of the farming community (related to organic farming)
2. Efforts to rebuild communities that have had some impact (related to organic farming)
3. Changing lives and efforts needed to rebuild organic farming

ESAP Case Study 2: Krisoker Saar (Farmers' Voice), Bangladesh

AUTHORS: SHAILA SHAHID AND ZAKIR HOSSEIN

This is a farmers' organic research institute that focuses on developing local understandings of organic. They have already conducted a lot of work on the role of women in organic farming, particularly their role in the management of plant genetic resources.

Krisoker Saar discusses women's empowerment in the sense of having economic viability, decision making power and the control over her body and resources.

Krisoker Saar see food chains, organic farming and women's empowerment as interlinked and indispensable part of women's live and livelihood as women are the primary and foremost care giver and care taker of the total family. Women's contribution to family needs such as nutrition is significant since they are responsible for vegetable, fruit and spice growing, poultry and livestock rearing in homestead agriculture. Women with their central role in household in the rural societies - particularly in the context of Bangladesh - also play a vital role in holding their experiential wisdom and pass it to the next generation, which often holds the key to many problems solutions. Consequently, these kinds of practices and traditions enable women to gain more control over their life.

Instead of producing diverse seed from homestead agriculture, women are engaged traditionally to select seed, drying, preserving, protecting during storage, saving them from any economical crisis of the family. To ensure the seed quality and the perfect storage place & methods, women hold the vast knowledge. They decide the quantity and variety of seed to be saved and the method of preservation. Seed selection by women is a continuous activity. Working in the fields, they observe the plants and decide which seeds to select. They identify plants of good quality on the basis of size, grain formation and their resistance to pests and insects. Here a woman looks at the seed from the view of a seed scientist. In this case, species purity, freedom from weeds, cultivar purity, germination capability, vigour, size, uniformity and health are being considered. For the storing place and method, they take care more to maintain different moisture content of different crop seeds. In these cases they use the experiential, intuitional and experimental knowledge.

Besides being the providers of life, women also nourish and sustain life. It must be acknowledged that traditionally it was the woman who played an important role in conserving life forms, which is ignored due to gender inequalities and it is now the woman who bears the brunt of environmental degradation by decreasing access to biological resources of her village. Furthermore, the organic women farmers in the region have taken prime responsibility to revive depleting indigenous livestock and poultry species of the region, as organic farming practices is interdependent on livestock and poultry for soil fertility management and animal traction.

Krisoker Saar raised some major challenges and barriers that are hindering the overall development and improvement of women's agenda in organic farming and food chains, these include corporate control, lack of ethical motivation, too much luxurious ambition, the intension of drawing quick benefit or profit making tendency within short period of time, conventional policy biasness, lack of adequate information regarding market chain, lack of access to enter the main stream market system, lack of strong women centered organisation, conventional predatory microcredit system and a lack of women-favoured strategy, policy and implementation from the Government

Agency

Women hold a variety of vast experiential wisdom and they play a major role in conserving and exploring traditional knowledge based wisdom. So participation of women are/ can support them for traditional knowledge exchange within or outside the community. It also creates

knowledge generation and upgrades their knowledge base, which ultimately increase their social inclusion. Thus their confidence level also build and they gain more bargaining and communication skills to reach their targets.

Participation may occur in many ways. Sometime the relation between seed and women is beyond 'rationale'. Sometimes the women hold such knowledge about seed that are not also 'rational'. For instance, to cross the floodwater tying up the jackfruit seeds in a thin fabric. But interestingly, it could have quite scientific base. On the point of seed, clearly to say, of the knowledge about seed, a woman never has conflict even with her rival. It is definitely interesting to see two women engaged in quarrel with the pick of their voices, but in the middle, one is asking other to test the moisture of the dried seed whether they are ready to store or not. The other is doing the job without any argument. It doesn't matter that the quarrel started with the picking up the seeds by the other's poultry!

Krisoker Saar describe the exclusion from various spaces that women experience. Very often women are excluded from the market chain, products market and different training sessions particularly in the context of a developing country like Bangladesh. The socio-cultural norms and even the patriarchal society and lack of women's inclusion in the mainstream market system do not allow women to have their own space and development.

In Bangladesh also the present system of local government body like Union parishad, different line department of government e.g., government livestock department, department of agriculture and department of fisheries and youth development institution there is no particular provision exists for including women in different training that are available to offer at the very grass roots level. No particular quota system is available for women although the existing government policy mentions to encourage women's empowerment and participation in different sector but in reality no such effective strategy or activities have been taken so far to increase women's participation in different training or other mainstream activities.

It is very obvious to upgrade the present status and position of women and their ability to speak out in such spaces like training and entering in the market value chain. Already some NGO's are working on this particular area for women's empowerment and increase women's income generating activities. This is being done by taking various steps.

The tiny Farmers' Research Institute Krisoker Saar (Farmers' Voice) also playing an active role in this arena. The ethical strategy and approach of the institution is that in all segment of life and livelihood, women are not competitor of men but for sure they are complementary to each other. Thus the marginalised women's voices can be/ are being raised by having regular dialogue (local dialect) with the women folk, organise them to form any particular producer/ products group, introducing them with the local small producer group, trying to exchange their products within the community, providing various agriculture, fisheries, livestock rearing training and how to conserve biodiversity and conserving the medicinal plants etc. And also providing training to increase their communication capability, encourage them to take part in different activities of the Union Parishad and trying to increase their leadership capability by providing

training at the very local level. The institution also initiated a knowledge exchange shop (*Gyanner dokan*) from where also regular dialogue, information exchange, local notice board are being arranged and particularly trying to work on different opinion building by giving particular importance to women's opinion and trying to meet their specific interests.

Krisoker Saar (Farmers' Voice) have the agenda and very strong and active choice to strengthen the voice of women and performing different activities at the field level for optimization of their strategies to transform it into real action. There is a growing recognition worldwide that gender bias and blindness constitute significant constraints that contribute to food insecurity given the critical role of women in determining and guaranteeing food security as food producers, food providers and contributors to household nutritional security.

The experience of Krisoker Saar recognises and identifies that lack of available gender disaggregated data means that women's contribution to agriculture in particular is poorly understood, and that their specific needs from eco-feminism perspectives are too often ignored in development planning. This extends to matters as basic as the design of farm tools. But women's full potential in agriculture must be realised if the goal to halve the number of hungry people towards enjoying a happy life in the world is to be achieved.

Krisoks perspectives recognises that the empowerment of women is key to raising levels of nutrition, improving the production and distribution of food and agricultural products, and enhancing the living conditions and standards of rural live and livelihood. *Krisoks* movement for Women in Development ensures that gender concerns and women participants are integrated in all relevant activities. It aims to give women equal access to and control of land and other productive resources, increase their participation in decision-and policy-making, reduce their workloads and enhance their opportunities. Identify, analyze and trying to determine the factors and issues related to complex inter-relationship of gender, ecology and environment by giving special emphasize from gender point of view. Seeking to strengthen women's knowledge and wisdom for equal participation, decision-making and empowerment of women.

With regard to men supporting an increase in women's agency, Krisoker Saar reports that, men and women are constantly in a materialistic and communicative interaction within and between themselves and the external power of world. Whenever socio-cultural systems dictate differential role patterns and life styles for men and women, their respective roles in the management of the environment tend to differ. The Institution KSFV believes and finds that the organic process of growth in which women and nature work in partnership has created a special relationship between women and nature. In this understanding, gender, that is the meaning of being a man and woman is neither fixed nor biologically or naturally given, but a social construction.

We *Krisoks* do respect individuality of all forms of life – but under fulfilment of certain norms and values of its own community. The initial attempt to understand the linkages between gender and biodiversity (including agro biodiversity) we have been trying to establish the social construction of gender roles and highlight certain gender dimensions of conservation and resource use. Thus from the very beginning and evolution of the KSFV, the Institution initiated

constantly dialogue and activism to include women in the mainstream activities by influencing their fellow Krisoks. Particularly the first initiative was identifying the roles of women and their specific contribution to the family and as well as to the Samaj.

The Institution also taken very active role to socially exclude the specific person or group who are not supportive to acknowledge the role of women and also KSFV taken specific action to encourage the drop out adolescent girls to take active part in the field level activities and has been trying to engage their leisure time for productive employment. Different kinds of activities also initiated for increasing income generation of women and giving priority and equal decision-making power within the institution and also in the Samaj. Consequently because of the significant movement and improvement of the nutritional knowledge and family health development, the male counterparts of the Samaj also begin to realize and review the role of women members in the family as well as in the Samaj. In this way they also recognize that for having or starting a *Notun Jibon* (approach of KSFV of a new life) it is very obvious that they support women to gain economic stability and have decision making power so that it will ultimately support them to have a healthy and economically viable family.

KSFV also identified various roles of women and practiced it in reality to visualize the strong image of women folk. For example, in the family women have their role as care taker, as mother and as wife, so KSFV recognizes that on each particular stage women have their own voices, so every member of KSFV should try and practice this and acknowledge their specific roles and contribution. On the other hand when women are in the field or while dealing any professional matter or while dealing with the women within the organization then KSFV always take the stand to introduce them as the equal member and staff of the organization with equal decision making power.

As part of our questionnaire we asked if participants had noticed any changes in women's access to, and control over, resources as a consequence of shifting to market-orientated organic farming from a subsistence-based farming system? Krisoker Saar have completed the following which outlines their experience in this regard.

Table 1: Commercialised Organic / Subsistence Organic Farming

Potential Impact	Commercialised Organic	Subsistence Organic
Increase/ decrease in household food security.	Decrease	Increase
Changes in women's roles in value chains (i.e. are they taking on new roles such as processing, storage, marketing etc, and if so, which/ why)	Increase	Decrease
Changes in the spaces where women can speak freely (such as training sessions or markets).	Increase	Increase

Potential Impact	Commercialised Organic	Subsistence Organic
Changes in women's access to, and control over, income, land, machinery, labour, crops and animals (both subsistence and market) and other assets.	Decrease	Increase
Changes in the way women relate to markets.	changing	Changing
Changes in the gender division of labour.	No change	No change
Changes in women's ability to generate income for her personal and household use.	Increase	Increase
Changes in women's decision making power and overall standing in the household and in the community.	Increase	Increase
Changes in the areas in which women considered are knowledgeable and are seen as experts.	Slow development	Increase

We also asked participants if they noticed any changes in women's access to, and control over, resources as a consequence of switching to market-based organic farming from a conventional farming system? Their response is plotted in the following table.

Table 2: Commercialised Organic /Commercial Conventional Farming

Potential Impact	Commercialised Organic	Commercial Conventional Farming
Increase/ decrease in household food security.	Increase	Decrease
Changes in women's roles in value chains (i.e. are they taking on new roles such as processing, storage, marketing etc, and if so, which/ why)	Increase	Excluded
Changes in the spaces where women can speak freely (such as training sessions or markets).	Increase	Excluded
Changes in women's access to, and control over, income, land, machinery, labour, crops and animals (both subsistence and market) and other assets.	Increase	Excluded
Changes in the way women relate to markets.	Increase	Excluded
Changes in the gender division of labour.	Increase	Excluded
Changes in women's ability to generate income for her personal and household use.	Increase	Excluded

Potential Impact	Commercialised Organic	Commercial Conventional Farming
Changes in women's decision making power and overall standing in the household and in the community.	Increase	Excluded
Changes in the areas in which women considered are knowledgeable and are seen as experts.	Increase	Excluded

Structure

For enabling and acknowledging the equality of women, KSFV have a specific gender policy within the Institution and also have the priority always to influence the Samaj about equal participation of women in all strata.

Some specific strategy within the institutional structure include:

- In the context of family health care, nutritional care of the family and children and homestead garden or organic farming development, always giving priority to the experiential wisdom and decision of women.
- Initiate regular local level dialect with the women folk of the community for identifying their particular needs and interests how to gain more control over their natural resources and particularly if they face any problem on farming or livestock rearing
- To organise them regularly and build their opinion on any specific issues of Samaj which have impacts over their live and livelihood
- Trying to increase their knowledge on specific personal rights, gender rights, civic rights, marriage and domestic violence, trying to encourage them for education.
- Take initiative to influence them to build the linkage within the local government institution so that they can play active role and also time to time gain knowledge about different incentives, safety-net facilities and initiative of the government.
- Encourage equal wage distribution for any wage labour related work be it agricultural farming labour or non-agricultural farming labour.

We were also interested to identify if the case study participant involvement in Organic Agriculture enabled a more equitable environment to develop, one that is responsive to the needs of women participants and partners? In response to this question Krisoker Saar response is below.

From *Krisoks* point of view, in every *samaj* or community, there has a rich tradition of systemic knowledge on the farming practices, coupled with rich biodiversity and different kinds of conservation ethics having intrinsic spiritual values – that influence the rural community to feel

the nature. Those spiritual beliefs and over so many years' experiences, dependency on local ecosystem resources and nature's benevolence inspired the local people to rely on their traditional experiential wisdoms and practices.

We *Krisoks* do respect individuality of all forms of life – but under fulfillment of certain norms and values of its own community. The initial attempt to understand the linkages between gender and biodiversity (including agro biodiversity) we have been trying to establish the social construction of gender roles and highlight certain gender dimensions of conservation and resource use. *Krisoks* perspectives recognises that the empowerment of women is key to raising levels of nutrition, improving the production and distribution of food and agricultural products, and enhancing the living conditions and standards of rural life and livelihood. *Krisoks* movement for Women in Development ensures that gender concerns and women participants are integrated in all relevant activities. It aims to give women equal access to and control of land and other productive resources, increase their participation in decision-and policy-making, reduce their workloads and enhance their opportunities. Identify, analyze and trying to determine the factors and issues related to complex inter-relationship of gender, ecology and environment by giving special emphasize from gender point of view. Seeking to strengthen women's knowledge and wisdom for equal participation, decision-making and empowerment of women.

We all are a part of the “Nature” and Nature exists through us. With all the elements of nature we *Krisoks* are proffering new visions of enjoying “*Notun Jibon*” (New Life) towards a just and peaceful local community for women and men. Integrating women in all strata of agriculture and organic farming as well is a social movement by local *krisoks* community on the way of life, a struggle with all the implications of the word “happiness and sharing.”

Relational

The *Krisoks* believes that women can not be separated from the organic farming practices since its inception from the very beginning of the history of organic traditional farming particularly in the context of Bangladesh. It is true that technological commodities are gradually removing women from the agricultural field. But women's contribution to family nutrition is significant since they are responsible for vegetable, fruit, spice growing and poultry-livestock rearing in homestead agriculture. For sure these are major source of food security in the households. In the perspective of Bangladesh till now the agriculture is mainly family based. Here rural women share most of the agricultural tasks with men. Moreover some agricultural activities are fully in the hands of women. Post-harvesting operations and homestead agriculture is the major.

So KSFV believes that women's relationship with Organic Agriculture is very constant and continuous although based on particular context and spaces and changes in the socio cultural and political arena this relationship is being transformed from one shape to another shape.

For creating an interdependent and accountable relationship KSFV particularly giving importance on different institutions. Primarily it started from the family level then to the Samaj and community itself. KSFV also trying to bridge the gap between the policy makers, researchers and field level actors as well as marginalised women's folk of the community. Hence they also

targeted the local government institutions, different government department and research organisation to work with and raise the voice and also KSFV working to translate the existing favourable laws and strategies that are available for women's equal participation and empowerment and then delivering it to the very grass root level in local dialect so that women can have knowledge about their equal rights and can identify and practice and access their rights and role.

Although there is a clear focus within the work of Krisoker Saar it is still primarily men who are chiefly targeted by external partners for discussion and capacity development. As is elaborated on below. Conventional Government policy and practices, the stereotyped social, cultural and political system always give priority to the male counterparts than female. But the changing contemporary development discourse at present prioritising women's agenda in all their programme implementing strategy. Hence, nowadays in the context of Bangladesh also, for any kind of discussion, participation, income generation and capacity development activities, women are becoming the target audience. As a result, women's social, economical and political inclusion is increasing and they are gaining more control over their lives and livelihoods.

Key lessons Krisoker Saar would like us to take forward in this report

- Women (with family) will be the shareholders of the industry after certain time of involvement.
- Women's knowledge on seed should be documented, tested and compared with modern scientific knowledge. After screening the knowledge, these will be disseminated to others through training, field practices etc.
- Farmers' right on genetic materials could be ensured on regional basis.
- In the question of any research, "Risk Factor" should have to be included particularly gendered risk perception of technology and natural damages.
- Gender concerns should be mainstreaming in all programmes and activities in agricultural sector.
- Determine the factors and behavioural patterns that influencing the initiatives of involving gender in all strata of farming sector.
- Giving special emphasize on the daily life experiences of women and its relevance for environmental and agricultural strategies by reflecting the power of women to create and shape the everyday life.
- Gender- sensitive indicators and social-sensitive technical design should be adopted or integrated.
- Women's positions in science, agriculture, technology and politics (in planning positions, decision-making positions and controlling positions) should be promoted.

- Women should not be seen in isolation. Broad-based policy initiatives in favour of women should be taken. Their roles and economic contributions have to be viewed from the perspective of the natural, social and economic framework within which they live.

ESAP Case Study 3: Women in Business Development Inc., Samoa

AUTHORS: KAREN MAPUSUA AND ADI MAIMALAGA TAFUNA'I

The Women in Business Development Inc. (WIBDI) was set up in 1991 as the first non-governmental organisation of its kind in Samoa. The organisation is committed to finding income generating opportunities, especially for rural village populations. This enables women to remain in their village environments, rather than leaving to look for work overseas or in the urban areas. WIBDI works in support of organic farmers offering organic certification support, and financial management and marketing.

Samoa is an island nation with rich volcanic soil, abundant sunshine, tropical climate and generous rainfall. The verdant year-round growth is far from the pollution, pesticides, and contaminants of other nations. It is an ideal organic safe haven.

In 2001 WIBDI farms gained organic certification from NASAA, the National Association for Sustainable Agriculture, Australia. Australian inspectors carry out rigorous inspections annually. WIBDI pioneered the creation of SOFA, Samoa Organic Farmers Association. It is not currently possible for any product from the Pacific to be Fair Trade labelled. There are no standards and no minimum prices established outside of coffee & cocoa in PNG.

Key crops include traditional mixed cropping systems, root crops, vegetables, coconut, cocoa, vanilla, noni, coffee and bananas. The Body Shop International is one of their key markets; they also export noni to Japan and the United States and coffee and bananas to New Zealand. WIBDI works with families rather than just women, helping them to understand the changing roles they have to contend with given their status in the cash economy. Many of the families we work with have not earned their cash before and traditional roles of men and women are changing, with women earning the cash in many instances and men having to do the women's share of the work.

This case study takes a different approach to women's empowerment by choosing to empower families together. With regards to gender relations in Samoa, the case study participants wrote 'although there are traditional male/female roles within families, with the women carrying a huge workload in some families, in Samoa, women are already empowered to a large extent, unlike other cultures in the Pacific'. By offering families the support to farm organically and providing on going follow up and nurturing for these families, we are addressing issues that arise when they happen, especially in regards to males and females being in roles that are not traditional.

Empowerment for the women begins when the men begin to see the value of their work and its contribution to the families' livelihoods, and work with the women towards the same goals rather than insisting that the women take on additional roles as well as those they already have.

Agency

Access to cash in an environment where cash poverty and poverty of opportunity are the way poverty 'looks' is the key factor in empowerment. Organics can create opportunities and also access to earned cash. By working in family groups we are making active choices to strengthen the voice of women producers, processors and traders. All of the work we do is within the context of the family group.

Men will support the women when they see that what the women are involved in is of benefit to the family as a whole. In Samoa, traditionally women make their own decisions about attending meetings etc, and within the matai or chiefly system they take on leadership roles as their husbands earn chiefly titles.

WIBDI have noticed changes in women's access to, and control over, resources as a consequence of shifting to market-orientated organic farming from a subsistence-based farming system. These changes include a greater diversity of food.

ESAP Case Study 4: Te Waka Kai Ora, National Maori Organics Authority of New Zealand

AUTHOR: PERCY TIPENE

Te Waka Kai Ora is an indigenous organisation committed to environmental and cultural sustainability. Te Waka Kai Ora (TWKO) is the National Maori Organics Authority of Aotearoa/NZ. TWKO recognise the unique qualities of our native foods and medicines that come from our rich indigenous flora and fauna. These *taonga* or treasures are an integral part of our traditions and as *kaitiaki* (guardians) our vision is to ensure that their *mauri* (essence) and integrity is maintained for future generations.

Te Waka Kai Ora is developing a number of projects to promote sustainable livelihoods that are grounded in *tikanga Maori* (Maori custom). We believe that a community-based focus is essential to developing an ethical framework and long-term vision for the organics industry. Organics provides an opportunity to maintain and enhance the vibrancy and health of Maori communities as well as other communities in Aotearoa (NZ). As such, it must be centred on a commitment to the health and well-being of *whanau* (families), communities and *whenua* (land) and the protection of the integrity of the environment.

We understand the term women's empowerment through the Maori concept of '*mana wahine*', to translate this term would be to describe the process of enhancing the authority, power and prestige of Maori women. Mana wahine is located in a Maori cultural context; if you were to talk about women's empowerment to Maori communities you would be better placed to describe it as mana wahine. It must be emphasised that the empowerment of women or mana wahine occurs within the wider whanau or family unit. Huia Jahnke (1998:2) describes mana wahine as, "*the power of Maori women to resist, challenge, change or transform alienating spaces within systems of domination*". Mana wahine or (women's empowerment) are processes of *tino rangatiratanga* (self-determination), practices, strategies that Maori women employ individually or

collectively which are grounded in *te reo me ona tikanga*. Mana wahine acts as a *kura* (knowledge base) where Maori women's thoughts and theories become validated giving visibility and space to the herstories, realities and aspirations of Maori women.

Some of the barriers to increasing women's participation in sustainable agriculture are the patriarchal structures and privileging that exists in tribal organisations, lack of training opportunities for Maori women to progress in developing a careers in this area, and a lack of understanding markets and export opportunities.

Agency

- Self esteem increases and this in turn has an impact on women's empowerment.
- Maori women achieve roles of leadership roles in OA which increases their agency.
- Economic benefits are returned to Maori women, this in turn provides choices and options to Maori women. TWKO is not undertaking any specific gender work to enhance Maori women's empowerment objectives or mana wahine. However, within our organisation gender is not identified as an important construct to consider in regard to equitable development. The men are very supportive and there are no issues with women being active participants in OA.

Structure

For Maori communities in New Zealand we are faced with living in a colonial reality; that is we live in a country where we are the indigenous peoples but are still in recovery from the impacts of colonisation such as language loss, loss of traditional culture which has partly contributed to an over representation in negative-based social indices. The Government's thinking in NZ is based on neo-liberal models and ideologies that perpetuate colonial ideas and assumptions. Part of the Maori journey to decolonisation is to reframe our analysis, experiences and pedagogies to those of our own Maori worldviews.

The Maori Organic Authority, Te Waka Kai Ora has an excellent relationship with the National Organics body of NZ called OANZ. Our traditional knowledge and position as indigenous to this land is well respected and honoured.

Key lessons TWKO would like us to take forward in this project

Programs to achieve women's empowerment in OA need to be culturally located and not imposed colonial based ideologies and gender norms onto indigenous cultures.

There needs to be some clear and adequately funded research and leadership in this area to better understand and focus on women's empowerment and OA.

B. LATIN AMERICA AND THE CARIBBEAN

Latin American and Caribbean countries currently export a high percentage of their horticultural products, especially to the USA. Despite some notable exceptions, however, most smallholders in the region remain disenfranchised from the export market. Around one-third of the rural poor across the region are indigenous, there is a marked inequality in the distribution of wealth and income, and the majority of agricultural producers work small plots, usually in marginal areas with low productivity. Rural women have become one of the poorest population groups as a result of internal conflicts, male migration both within and outside the region, natural disasters, and the consequences of structural adjustment. Women's ability to participate in markets will not improve unless they gain land ownership, access to formal financial and technical assistance, and a good level of education and training (IFAD 2007b).

Assisting women farmers to access niche export markets for high-value and brand-marketed products such as fair trade and certified organic products is one way forward. Another is to conserve, research, and commercialize indigenous fruit varieties. There is significant potential to expand production and consumption for local markets and supermarkets, but product quality and reliability must be enhanced. A coordinated public awareness campaign is needed to emphasize the benefits of fruit and vegetable production before this potential can be realized (USAID 2005)².

LAC Case Study 1: Asociacion de Productores Organicos del Uruguay (APODU)

AUTHOR: MARTA CHIAPPE

According to IFOAM, Uruguay is the 6th country with more Organic Agriculture area in the world (due mainly to the area devoted to organic cattle production). The total area under Organic Agriculture is 930.965 hectares (out of 16 million hectares in the country); of these 926.474 ha are devoted to cattle production. Organic meat production is oriented towards international markets. The key crops are vegetables, dairy, honey, medicinal and aromatic herbs, cereals (mainly wheat and maize) and poultry.

With regard to women's empowerment APODU state that *women's empowerment has not been specifically planned and there is no explicit definition*. However, in the last 3-4 years women's participation has grown in decision-making positions. Currently there are 2 women (and 3 men) in the Board of Directors and in the Open Board of Directors meetings (held once a month or every 2 months) there are about ¼ women participating (out of 20 persons, 4-6 are women). This evolution has been slow but steady; since 1994 (year of APODU's foundation) up to 2002 the majority of meetings were predominantly attended by men. Despite men have prevailed in decision-making positions, there was not any claim from women's part to increase their participation.

In 2005, a project named "*Social organizations of urban and peri-urban agricultural producers: Management models and innovative alliances for influencing public policy*" coordinated by IPES-

² Taken from Farnworth, C.R. (2008) 'Module 5: Gender and Agricultural Markets' in Gender in Agriculture Sourcebook. World Bank.

Perú, funded by IDRC (Canadian Agency), with the participation of several agencies (ETC, CIEDUR) and developed in 4 municipalities of South America and 3 of Europe, was initiated.

In the text of this project the issue of women's equity between men and women was specifically raised: "Another way of incorporating diversity is to foster female participation, for two reasons: equity and reality. Women are actively involved in many occurrences of the organization and/or the units of production; however, they don't have access to decision-making instances. Their access to these instances will contribute to include their vision in the organisation as a whole (p. 10)."

The second phase of the project started in 2008 and it involves 12 women and 2 men. According to Ivet, this project has been very important to increase women's self-esteem. It's being conducted in Argentina, Peru and Uruguay, and oriented to tomato processing. Men's participation will be sought.

Women are more involved in organic intensive production (mainly horticulture, medicinal and aromatic herbs and dairy production). In Uruguay there are about 150 certified organic producers (cattle producers not included - they are export oriented, very large and their rationale is very different to organic small farmers). In the Southern region—where most of the organic intensive production is located—there are about 40% women producers in organic agriculture.

One particular aspect is that women in organic production define themselves as "farmers", which is very uncommon among conventional farmers (in general women in conventional farming define themselves as "collaborators"). They are mostly involved in herb production (both medicinal and aromatic), cheese making, and preservation of fruits and vegetables (canning). Vegetable production is male-oriented (7 out of 10 male organic farmers are involved in vegetable production). In horticulture, women are mostly involved in packing. The majority of women organic producers in the Southern region (57%) have attained just primary education and 25% secondary education, while 38% of male organic producers (also Southern region) have reached the third educational level (university and other third level institutions) (Berhau, 2004).

According to the interviewees, the risks that prevent the development and implementation of a women's empowerment agenda are those that affect family farming in general. There is little support for family farmers and specifically Organic Agriculture is not a priority for the national government. Therefore, women organic farmers are as vulnerable as family producers in general. No specific impediments to implement a women's empowerment agenda were identified by the interviewees.

Agency

The more women participate in organic farming the more they get involved in decision-making events. They've increasingly gained more experience and skills, more self-esteem and empowerment. There are four areas in which women are presently involved in decision-making roles:

- “Ecogranjas” (cooperative of 40 producers open to all APODU producers- Women participate in the coordinators’ team)
- Ecotienda (Shop for organic products in Montevideo)- 3 women work there as employees.
- Farmers’s market (every Sunday at a fair of Montevideo). Out of 8 stands, 4 are tended by women.
- APODU. 2 women out of 5 persons on the board of directors.

Ivet explains that she hasn’t felt excluded nor discriminated; on the contrary, she’s felt the support and encouragement of her colleagues to participate on the Board and to take more responsibilities at the organization.

Despite promoting women’s empowerment is not acknowledged as a specific strategy, some actions have been taken to promote women’s participation. One is to take into account school days and hours when holding meetings, so that meetings do not interfere with family time.

One of the barriers identified is women’s own attitude: women often feel they are unable to contribute and they self-exclude from participating in some specific activities (“I’m not capable of doing this” “I don’t know anything about that”).

Marta Chiappe: The woman interviewed is on the Board, but she doesn’t identify any specific “choice” of the organization other than taking into account women’s “free” time to attend meetings. From my perspective gender issues are not a specific concern of the organization (either for men or for women integrating the Board).

Ivet: According to her experience, colleagues of APODU and her family were very supportive and encouraged her to participate in meetings and take on leadership positions. Up to 2003, women’s participation was very limited in general assemblies of APODU. From 1997 to 2005 there weren’t any women on the Board. In the last 3 elections of the Board more women voted.

Participatory Certification is conducted by an Ethical Committee in each Region (Uruguay is divided in four regions for the sake of APODU’s organization). These committees are formed by three representatives: One producer, one consumer, and one technician. There’s no assessment on the impact women’s participation on these committees empowered them, but the fact is that they are actively involved.

Relational

There has been a greater exposure and contact with other NGOs and international organizations (other organic organizations, mainly from Brazil) through an increase in Organic Agriculture activities. Men tend to ones involved in political negotiations with governmental institutions. Women haven’t participated. For instance, negotiations with the Ministry of Agriculture

to approve the normative framework for the Participatory Certification System took about a year and were conducted by some of the male members of the Board.

C. NORTH AMERICA AND EUROPE

NAE Case Study 1: Organic Farming in California

AUTHOR: LAURA-ANNE MINKOFF

I am a graduate student at UC Berkeley. I have worked in the organic farming movement as an apprentice at a small organic CSA in upstate New York, Full Belly (Organic) Farm in Guinda, California, and The Mesoamerican Institute for Permaculture (IMAP) in Guatemala. My current research concerns female immigrants in California farming.

I have observed and experienced contradictions in the organic movements' progressive social values in reference to gender issues and the lifestyle of "returning to the land" and manual labor necessary for farming. In my experience, all versions of the rural farming lifestyle tend to reinstate traditional gender roles on some level. Especially on medium size, but also on very small organic farms I have seen women take on the more traditional roles of gardening, animal care, food processing, and bookkeeping. On all organic farms I have worked with or spent time on, (especially those that are primarily production oriented, not education oriented) men do most of the tractor work, machine work and field work. I found there to be less opportunity than I expected to learn these skills as a woman with no background working with large machines. On the farms I have worked on operating the tractor was a status symbol as well as a position of power and decision making.

In comparison to conventional farming, I would assume organic farming does increase agency/decision-making capacity, as very few women are involved in conventional farming as far as I know today, besides as migrant fieldworkers. The women I worked with on organic farms did have major decision-making power on the large scale; planning the farm strategy, marketing and otherwise. As far as day-to-day planting, managing workers, and field management women played more of a background role, staying in the office and on smaller farm jobs. Of course this varied depending on the size of the farm- the larger the farm (and the more production oriented) the less involvement women had in daily management tasks.

That said, on organic farms there is more hand labor (versus machine-oriented labor) than on conventional farms and therefore more opportunity for women to take leading roles in production. As organic and eco-focused farming operations do tend to be run by people from non-farm backgrounds, there can be a new conception of gender roles. Unfortunately, men still tend to have more experience with machinery (and are generally physically stronger) and therefore even on farms where people have progressive ideals of gender equality, men often take more of a leadership role in production.

In my opinion in order to improve women's empowerment on organic farms these contradictions and issues must be addressed head-on. If women are to be stronger decision makers in the

field (not just the office) there needs to be specific training for women on machinery operation and maintenance. We cannot assume men and women enter organic and alternative farming with the same experience and we must start looking at that as a barrier to equality on organic and alternative farms.

D. SUB-SAHARAN AFRICA

In Sub-Saharan Africa, women are largely responsible for selling and marketing traditional crops such as maize, sorghum, cassava, and leafy vegetables in local markets. In countries where urban markets for these traditional crops are expanding rapidly, such as Cameroon and Kenya, the challenge is to ensure that women retain control over their production, processing, and marketing. In Uganda, strong demand for leafy vegetables (traditionally a women's crop) in Kampala markets resulted in men taking over their cultivation (Shiundu and Oniang'o 2007).

Women are the traditional producers and marketers of horticultural crops throughout sub-Saharan Africa. Although horticultural production has risen steadily in most regions of the world over the past few decades, the average annual growth in per capita supply of horticultural produce was negative in sub-Saharan Africa between 1971 and 2000. Inadequate transportation infrastructure and inability to comply with international standards -especially EUREP-GAP standards³ - limits participation in export markets. Since many producers, particularly women, lack good access even to local and regional markets, the development of cold-chain, transportation, and communications infrastructure will be critical to link producers with these markets. Building capacity to manage horticultural businesses and also to conduct research is a priority⁴.

SSA Case Study 1: Women's Organic Cooperatives in Uganda

AUTHOR: CHRISTINA EHGARTNER

With regard to this case study women's empowerment means having the free choice over the means of production; choice of what to cultivate and in which way (by free choice I mean that no husband influences the decisions), being able to pay school fees for their children, having a social network around, that provides help in diverse situations (sickness, times of high labour need)

I think in the present case study the main factor for women's empowerment is that these women were organised in groups. These groups were originally formed in order to get information about better farming methods etc. Later organic farming principles and methods were taught and crops for commercialization were chosen. At the moment of the study the women were organising themselves within these groups to put experiments into practice. In a later step these groups are going to be highly relevant in the process of group certification of the organically produced crops.

3 The Euro-Retailer Produce Working Group's Good Agricultural Practices.

4 Taken from Farnworth, C.R. (2008) 'Module 5: Gender and Agricultural Markets' in Gender in Agriculture Sourcebook. World Bank.

In this case study the groups are needed to promote organic farming and to put it into practice collectively. As a consequence the social side-effect of the groups give a lot of self confidence to the women. Self-confident women seem to be more empowered.

Agency

In my case study the women seemed to feel free to speak out in front of other group members maybe because they were only women. The women groups only accept female members and active members continuously try to motivate other women of their surroundings to join the women's groups. In my case study it is, however, men who teach the women on the different farming methods as well as it is men who help to monitor and supervise the on-farm experiments etc. Those men I have met, they have been studying at university and were working for an organisation. I had the impression that they tried to do their best to pass over the information they had and to encourage the women to participate in the project.

Table 1: Commercialised Organic / Subsistence Organic Farming

Potential Impact	Details
Increase/ decrease in household food security.	
Changes in women's roles in value chains (i.e. are they taking on new roles such as processing, storage, marketing etc, and if so, which/ why)	
Changes in the spaces where women can speak freely (such as training sessions or markets).	The women's groups as a whole; training lessons;
Changes in women's access to, and control over, income, land, machinery, labour, crops and animals (both subsistence and market) and other assets.	Access to labour from the other members of the women's group; access to animals (milk cows) although this was not really related to organic farming;
Changes in the way women relate to markets.	They learned about markets that might be relevant to them and with help they figured out which were the most appropriate crops for them to grow; so to say, they got help in choosing locally adapted crops for existing markets
Changes in the gender division of labour.	
Changes in women's ability to generate income for her personal and household use.	Yes; the commonly grown crops were sold on the market and income was shared; most of the interview partners had a better income since they were in the women's group; for the organically grown crops in particular it cannot be said yet;
Changes in women's decision making power and overall standing in the household and in the community.	the women's group as a whole was known in the community and had a reputation of being "successful"

Potential Impact	Details
Changes in the areas in which women considered are knowledgeable and are seen as experts.	
Other (please insert)	

I think there is always a risk for (smallholder) farmers if they produce for a commercial market and even more for a global market (export market). In my case study most farmers reported that some years ago they had invested a lot of their time, money and land into the production of vanilla and coffee, because it was said that these were the crops with a high demand. Some years later that demand has decreased and farmers actually do not get a price that is worth to do the harvesting of the crops. Within this women's project locally adapted crops were chosen to be grown for export markets. In this case they had chosen ginger and beans as the most adapted crops for their situation. The women had again big hope that if the ginger comes out well they will get a lot of money from it.

I think a risk with commercialised agriculture is that if crops that are traditionally not used by the local people are grown on a bigger scale for selling, there is a risk if the targetted markets are satisfied or brake down. In this case study ginger is not really used locally; beans can always be sold on the local market or eaten by the families. Before it was the same story with vanilla and coffee, that were produced for selling only. I think it would be more secure if what is already produced locally is just produced in higher quantities for selling (exporting); if there is nop market then people can at least still eat themselves or sell on local markets."

Key lessons APODU would like us to take forward in this project

The ideology of Organic Agriculture requires not only the knowledge and understanding of natural cycles and relations but also the cooperation of people. In my case study this working together and putting the strengths together enabled the women to pursue a more "successful" life.

In Organic Agriculture there is a general tendency to grow plant species that are local and thus more adapted to local climate conditions. The production and harvests are somehow less vulnerable and more "sure". So even of it is for subsistence farming it creates a more stable environment because of less mining farming practices, more attention on what is going on in the fields etc.

SSA Case Study 2: Solidaridad

AUTHORS: IRENE GUIJT AND EDITH VAN WALSUM⁵

Solidaridad is a Dutch non-governmental organisation which has pioneered fair trade since the mid-1980s. The NGO has taken a variety of groundbreaking initiatives to promote the development of 'fair' and 'clean' chains. To realise its aims, Solidaridad has spawned a wide range of governance, certifying, supervision, marketing and mainstreaming institutions that operate as a web of independent but interrelated institutional innovations. For example, Fair Trade Labeling Organisations International (FLO) is an offshoot of Solidaridad's efforts to create independent certifiers. Solidaridad's focus on these and other institutional innovations has proved vital to the functioning of this novel, value-driven type of trade.

Solidaridad launched the Max Havelaar Coffee trademark in 1986, creating a mechanism that enabled producers to get a fair price for their coffee. In 1996, Solidaridad initiated the Oké label for fair trade bananas. This involved establishing AgroFair, an independent trading company, which has seen an explosive growth of banana imports. The 'tropical fruit basket' concept was created in 2003 to include mangoes, pineapples, oranges, mandarins, lemons and fruit ingredients. Solidaridad has gradually incorporated the environmental and health costs of production, thus expanding its fruit label from Oké to Eko-Oké (the Dutch indication for Organic and Fair Trade). Since 2000, Solidaridad has also been working on the development of fair and organic textile, biomass and soybean chains. Each commodity chain offers unique challenges and opportunities.

Solidaridad believe that women's involvement in fair trade automatically implies a strengthening of their position. It assumes that gender issues are dealt with because fair trade generates formal labour opportunities for women and FLO regulations on gender are followed. However, we argue that a deeper understanding and critical reflection on gender equality is needed to guide the organisation's theory of change.

The West African Fair Fruit Project

While Ghana and Burkina Faso continue to face widespread rural poverty, both are also the scene of encouraging developments in the fruit export sector (World Bank, 2001). Ghana made important strides in developing its exports of pineapple and banana during the 1990s. It became the third exporter of pineapples to Europe within four years. Though a small player in the African banana export market, Ghana is so far the only African country to export organic and fair trade bananas. Burkina Faso has a growing export market for mango. Mango production is naturally organic in the country, and is mainly grown by small and medium farmers. The fruit export sector is gaining increasing recognition and support from the private sector, funding agencies and research institutions. Multinational companies are tending towards greater geographical diversification and are keen to establish themselves in West Africa. Solidaridad's

5 This is an excerpt from an original chapter by the authors entitled 'Balancing Business and Empowerment in Fair Fruit Chains: The Experience of Solidaridad'. This is published in Farnworth, C. R., Jiggins, J. & Thomas, E.V. (2008b) 'Creating Food Futures: trade, ethics, and the environment'. Gower, London. ISBN 978-0-7546-4907-6. In the chapter, the authors also discuss gender issues in relation to a new banana chain project in Peru among other topics; their work is warmly recommended.

strategic choice to engage in the fair fruit trade in Ghana and Burkina Faso, therefore, has been the right choice at the right time.

Solidaridad initiated the West African Fair Fruit Project (WAFF) in 2003, with funding from the European Union. WAFF's objectives are twofold: to promote new and sustainable sources of income and employment for rural poor people in Ghana and Burkina Faso, and to establish a farmer-owned service company to promote fair trade and organic fruit production and exports.

In Ghana the WAFF project works with Farmapine Ltd, a production cooperative of 360 small to medium size pineapple farmers, and with VREL, a banana plantation that employs 600 labourers. Both manage their own packaging and transport to Europe. In Burkina Faso WAFF has established a company, Fruiteq, which manages the selection, packaging and transport of mangoes to Europe. Two newly formed mango producer cooperatives supply their fruits to Fruiteq.

Making the Choice for Gender Equality

If fair trade is to benefit women on a par with men, choices have to be made for gender equality. Logical as this may sound, in the WAFF project we saw no deliberate choices aimed at promoting gender equality. Whilst WAFF partners ensure that FLO norms regarding working conditions of men and women are followed, for instance that toilets and washing facilities are provided to women, other aspects of women's participation in WAFF-related enterprises do not appear to be the product of intentional design.

Labour opportunities merit a critical look. Currently, women's involvement in production reflects the common division of labour in the area. Whereas men do the plucking - 'an arduous task', women are considered experts in packing - 'needs precision and patience'. But which women, and which men, gain or lose from the changing divisions of labour associated with the shift from local to export marketing; and what is needed to compensate for any adverse effects on gender relations? For instance, in the case of mango production and marketing in Burkina Faso, some women have gained due to new employment opportunities at the packing station. However, other women appear to have lost due to reduced marketing opportunities. Mangoes that women used to sell locally are now marketed internationally, but the role of women in the international marketing chain is much smaller than in the local market. What is the balance between gains and losses in this case, and what are likely future developments? These questions have not been addressed by the project or its partners.

Women's involvement in decision-making is another issue. The premium committee formed at the VREL banana plantation has two women members. This shows that the need for women's participation is formally recognized. However, these women have little say in determining how the fair trade premiums are spent. They lack the assertiveness or power to express their views and to influence decision-making process. It had not occurred to VREL staff to stimulate and support women to play a more active role.

Summing up, women participate in WAFF as part of the labour force but not as active decision-makers. This is, we believe, a result of WAFF's lack of a gender strategy and in its not making a

deliberate choice to involve women. WAFF limits itself to meeting the minimum status quo demands. Formal gender equality, as expressed in fair trade norms, is respected. But there is little concern for and awareness about substantive gender equality⁶ - the actual influence or control of women, and what they⁷ stand to gain or lose when certain decisions are made.

Is fair trade fair to everyone?

Fair trade implies that producers and workers in the chain - men and women alike, producers and harvesters alike - are entitled to their 'fair share'. Within this concept there should be no place for exclusion or marginalisation of women. Just as fair trade requires a pro-active strategy towards marginalised farmers or harvesters, it also requires a pro-active strategy towards women: women as leaders and decision makers, not just as labourers.

However, while fair trade standards include gender-specific criteria, this does not mean that the organisations in fair trade commodity chains operate with a clear gender-aware vision or theory of change. We noted an absence of gender vision in the work in West Africa, with women present as silent members of cooperatives or committees, or referred to as 'benefiting within the context of the family'. We observed that formal norms for gender equality, as expressed in Fair Trade standards, are being respected. But the notion of substantive gender equality - women's actual influence or control, what do they gain and lose - receives little attention. It has not been internalized as an issue of concern. The situation elsewhere in the world of fair trade is unlikely to be different, if the absence of documented experiences and silence on this issue in the fair trade sector is indicative.

Opportunities to address gender inequalities are being missed. Women deserve better under the auspices of fair trade. If women are sidelined and gender is not considered within the mainstreaming process of fair trade, one could argue that fair trade objectives will never be reached. Furthermore, not tapping into women's potential amounts to inefficiencies that are likely to obstruct sustainability of overall efforts.

If empowerment is about creating work for men and women, then the work to date is more than promising. If, however, empowerment refers to the political consciousness and informed choice that marked the early origins of Solidaridad's work on fair trade, then we suggest that organisational strengthening and farmer empowerment be given further support at this stage.

6 Formal gender equality refers to the formal aspect of gender relations, e.g. the percentage of women members in a committee. Substantive gender equality refers to the factual balance of power, e.g. can women exercise real influence in a committee. Formal equality may help improve women's living conditions and contribute to substantive equality, or it may be a mere formality. However, women are truly empowered when there is substantive gender equality. The notion of substantive vs. formal gender equality is central in the international women's rights movement.

7 Solidaridad's position is that fair trade brings many producers from an informal to a formal economy, that new jobs are created, especially for women; and hence that women are benefiting most from this change. While this is certainly often the case, a broader understanding is needed of the impact of fair trade on gender equality in formal and substantive terms.

SSA Case Study 3: Sao Tomé and Príncipe: Participatory Smallholder Agriculture and Artisanal Fisheries Development Programme (IFAD Project)

AUTHOR: NORMAN MESSER AND TEXT FROM IFAD (NO DATE)⁸

IFAD's programme addresses the vulnerability and major constraints identified by the men and women of both sectors by improving their access to internal and external markets. It strengthens the provision of rural-sector services (decentralized financial services, agricultural extension and coastal fisheries management) while empowering the beneficiaries to increase their access to these services and tailoring them to their specific needs. The programme also provides support to the rural-sector restructuring process initiated by land distribution and privatization. The objective is to pave the way for the development of rural local councils with the power, methods and tools to undertake local development activities. The beneficiaries comprise 8 000 families that received smallholder status in 1993 under the Land Privatization Programme, of which 30% are headed by women. A preliminary analysis of smallholder cash flows indicates an annual per capita income of USD 200. The programme also targets 3 000 artisanal fishery families consisting of about 2 200 fishermen and 3 000 women fish traders (palayes), with an estimated annual per capita income of USD 162. The total expected programme target group consists of 58 000 people or 41% of the Sao Tomean population.

KAOKA, a French chocolate producer (supplying to, among others, Carrefour, Harrods, etc) is buying as much organic cocoa as farmers can produce. Cocoa sales represent 90% of Sao Tomé and Príncipe's export earnings, but extreme price volatility was causing many producers to abandon their farms. In 2000, IFAD commissioned Kaoka, the organic branch of a large French chocolate producer, to analyze the country's cocoa sector. The study concluded that the rich genetic origin of Sao Tomé cocoa varieties could produce superior quality aromatic cocoa beans, fetching higher and more stable prices than common cocoa. Kaoka agreed to supervise the project and to purchase as much certified organic cocoa as the farmers could produce. Farmers received technical advice and extension services to help them make the transition from producing medium-quality cocoa butter to high-quality dried cocoa. A solar cocoa dryer and storage facility made the most of the cocoa harvest. By the end of the pilot project, the farmers had produced 100 tonnes of certified organic cocoa that sold for two and half times the price of common cocoa. Farmers then created a cooperative that reunites 20 associations, of which 39% of its members were women. During the first phase of the projects, farmers had doubled their incomes and created social funds.

Market-Orientated/ Conventional Farming

Just like conventional farming, if the crops involved are crops produced, harvested, processed, and/or sold by women, and the revenues thus earned belong to them alone and they do not need to share them with their husbands, then this can surely be very empowering for them, as it will also have an impact on their social status and their involvement in community-level affairs.

⁸ IFAD (n.d.) "Sao Tome and Principe: Participatory Smallholder Agriculture and Artisanal Fisheries Development Program: Women Fish Traders." Internal Document.

Regarding the ability of women to participate more actively in decision-making (beyond intra-household resource allocation), one of the main obstacles we are confronted with is that the agricultural produces cooperative culture is very male-dominated - as long as forms of collective action are "informal", i.e. women's groups, etc., we find a lot of women, including in key positions (chairperson, treasurer, etc.)...but not in formal cooperatives, especially the ones that export organic agricultural commodities.

As you know, one of the main constraints to the empowerment of women in Western and Central Africa is control over land. In agricultural societies where women have their separate plots - because they married into a village and were temporarily assigned such land by their husbands by way of customary authorities -) these plots are typically allocated to household staple food production, surpluses not being marketed, but stored in the wife's own granary. Given that one of the problems with Organic Agriculture is certification of the land, theoretically it should be possible, at least in the case of food secure communities, to convert these women-controlled plots into plots fit for organic farming for the export of commodities (but I do not know of projects that promote this type of approach). Alternatively, organic commodities that are not "land-based" (honey, tree crops, etc.) may be easier to tackle as women are generally in charge of collecting honey, wild fruits, etc., from (not "de jure", i.e. in legal terms, but de facto i.e. by tradition) community-owned land and have access rights to these commodities (including, e.g. in the case of land and the trees thereon, owned by their husbands).

ANNEX 2. IFOAM TOR

Desk Study on How Organic Agriculture can effect the Participation and Empowerment of Women.

Background

IFOAM intends to facilitate equal participation of women in the Organic Agriculture movement. As one activity aimed at achieving this, IFOAM is planning the elaboration of a study on Organic Agriculture's potential for women's empowerment, which is to be tendered to a consultant.

Overall Objective

Organize a Study on how Organic Agriculture can effect participation and empowerment of Women.

Specific Objective

To shed light on the assumption that OA can contribute to the empowerment of rural women, and to share "lessons learned".

Output & Results

The expected output of this consultancy will be a collection of analytical case studies in the format of an "IFOAM Study", wherein the contribution of OA to the increased participation and empowerment of women is clearly outlined. The study should deliver the following:

- Case studies should be drawn from a balance of both developed and developing countries.
- The nature of the "participation" and "empowerment" described in each case study should be explicated either in terms of widely used categories such as "agency" / "structure" / "relations", or in the concepts and words of the women in question. The following questions might help in operationalising these concepts for the purpose of the study:
 1. How does Organic Agriculture support the expansion of women's capabilities to identify, pursue and achieve their basic needs and rights? (Agency)
 2. How does Organic Agriculture promote a more responsive and equitable enabling environment, as embodied in cultural constructs, legal and policy frameworks, economic and market forces, and bureaucratic and organisational forms? (Structure)

3. How does Organic Agriculture promote more interdependent and accountable relationships between women and the key people and institutions they engage with in pursuit of their needs and rights? (Relational)
 - Provide a detailed description and analysis of OA empowering women, in terms of the “mechanisms” at work, enabling factors (conditions), and risks and challenges to be overcome.
 - Establish a clear causal relationship between OA and the process of empowerment described.
 - Special attention should be given to the question of commercialisation of OA, its risks and opportunities for women and whether Organic commercial agriculture is more advantageous for women than conventional commercial agriculture.
 - Outline the lessons learned and draw conclusions on how they might be applied elsewhere.

ANNEX 3: STUDY DESIGN AND METHODS

The qualitative design taken in this study emphasizes understanding individual realities, herstories and interpretations. It does not aim to produce an objective understanding based on broad generalisations pertaining to the empowerment of women and organic farming. *“The point of a qualitative study is to look at something holistically and comprehensively, to study it in its complexity, and to understand it in its context”* (Punch 1998). We acknowledge that the perceptions, experiences, constructions and representations of the research participants’ real worlds have been privileged through their inclusion in this study (Halim 1987 cited in Robinson, 1998).

Case Study Selection

The study was undertaken primarily through case studies developed with key informants. Studies were selected to ensure:

- geographical balance;
- that the variety of the organic sector, including certified and subsistence farming, is represented;
- that comparisons can be made between the empowerment effects of participation in organic and conventional farming;
- that the different roles women play as plant breeders, seed conservers, farmers, processors, marketers and consumers in organic food and farming are reflected;
- that empowerment is also understood to include women as contributors to the historical and on-going debates around the ‘meaning’ and definition of organic – the shaping of norms and their expression in standards, and;
- that the unique voice and insight of indigenous peoples on organic farming and women’s empowerment are represented in the choice of case studies and the overall analysis.

A questionnaire was constructed and then e-mailed to selected participants. A copy of this questionnaire is provided in Annex -.

Analysis/ Interpretation of Information

As part of the analytical process, we reflected on our own positioning and the validity and relevance of the analysis we were generating. The completed questionnaires were examined to identify themes, commonalities and inconsistencies in the experiences and perceptions of the respondents and the case studies they were describing. The identification of themes had the following benefits:

- It identified interesting data representing a research theme.
- It threw up interesting data that appears to be outside an established research theme.
- It signalled that more data on a theme is needed.
- It flagged an entry as worthy of storage within a thematic file.

This methodological approach and the identification of themes supported our analysis objectives, which were to:

- Draw out key cross-cutting themes of the case studies
- Identify best practices and lessons learned
- Provide recommendations for action, and
- Suggest further areas for research where knowledge gaps have been identified

Positionality and Reflexivity

Consistent with our approach to this study we acknowledge that as the re-searchers and authors of this study that we occupy a subjective position as researchers, and reject the possibility of value free objectivity and neutral science. We acknowledge that we have biases that are formed from our own positioning. We have therefore situated ourselves reflexively throughout the research process to militate against any universalising claims to knowledge traditionally associated with positivist science. As Nicola Simmonds (2000) notes, "*The premise behind reflexivity is that understanding arises from participation and true objectivity is neither possible nor inherently valuable*".

ANNEX 4: LOCAL AND INDIGENOUS KNOWLEDGE

Although indigenous peoples and their knowledge account for much of the world's understanding of biodiversity and traditional sustainable practices, indigenous peoples have been marginalised through processes of colonization, globalisation and corporatisation at all levels of the decision making processes concerning biodiversity management and sustainable agriculture (Hutchings 2003). Today, indigenous peoples are struggling to protect their knowledge, environment, biodiversity and sustainable agricultural practices in the era of commercialized patented global agriculture.

Diversity is a key feature of indigenous knowledge. Expressions of indigenous knowledge systems include ceremonial and ritual objects, performances and artistic designs. Of particular importance is the expression of indigenous knowledge through customary practices such as hunting, fishing, gathering and agriculture. The exercise by indigenous peoples of their rights to carry out these activities in accordance with their lores and customs can be regarded as an assertion of rights to their traditional knowledge systems. Indigenous knowledge is recognised by some as a form of knowledge that can complete a holistic picture through linking myth, spirituality and cultural practices. The UNCED (cited in Hutchings and Tipene, 1997:3) stated that, "indigenous peoples' cosmologies may contain maps of trophic webs and energy flows which to a great extent accord with the discoveries of 'empirical science'.

Indigenous peoples' knowledge is increasingly accepted as a constant necessity for sustainable development (Berkes and Folke, 1994). The Convention on Biological Diversity (CBD) developed at the 1991 Rio Earth Summit valued indigenous peoples' knowledge and relationships pertaining to biodiversity. Furthermore, indigenous peoples and their knowledge has been affirmed in the recent ratification of the United Nations Declaration on the Rights of Indigenous Peoples. This Declaration is representative of international recognition of the rights and aspirations of the world's indigenous peoples as expressed and negotiated by them. The Declaration values the diversity and legitimacy of indigenous knowledge as a body of knowledge. It also expresses the spectrum of rights of indigenous peoples, with the unqualified right of self-determination as the central pillar of the Declaration, as well as the individual and collective rights in relation to the ownership, use and control of their lands. This position has been reiterated in numerous indigenous global and regional statements, including the Kari-Oka Declaration, the Mataatua Declaration on Cultural and Intellectual Property Rights of Indigenous Peoples, the Recommendations of the Voices of the Earth Congress, the Charter of the Indigenous-Tribal Peoples of the Tropical Forests (Posey, 1996).

Challenges to be addressed include ensuring that local and traditional knowledge is protected and developing innovative approaches to intellectual property rights.

Challenge: To ensure the protection and nurturing of local and traditional knowledge in the interests of preserving agro-biodiversity and encouraging pro-poor technological innovation.

Through a process of informal learning and adaptations, farmers, especially smallholders in the tropics, home to the world's greatest reserves of biodiversity, have developed a wide range of farming systems that are compatible with their ecological niches. The bio-diverse character of many such farming systems facilitates environmental sustainability through the provisioning of diverse ecological services (Di Falco and J.P. Chavas, 2006). They help to ensure the conservation of the diverse genetic pool of landraces needed for modern plant breeding (Brush 2000). Through agro-diversity, risks of complete agricultural failure are minimized and food security enhanced.

In terms of international public goods the principle is that without recognition of local and traditional knowledge and its utilization there is little chance that technological innovations that are targeted, relevant and appropriate to the poor will be developed (Bellon, 2006).

Strategies/ Options

Options for conserving, improving and contributing to the evolution of local and traditional knowledge at a range of scales include:

- Participatory research approaches involving collaboration among scientists, farmers and policy makers in order to document, nurture and up-scale good smallholder farmer resource management practices. Those that bear positive results with respect to environmental sustainability, biodiversity conservation, crop improvement, and food security should receive particular research attention. A systems approach to research is needed in order to locate such positive benefits in context.
- Participatory research provides opportunities for local and traditional knowledge to evolve as a result of the interaction with a continuous contact with scientific knowledge. This evolution could be different from what might have happened in absence of the interaction with scientists. Is this good or bad? One challenge is to include in participatory research work a component to evaluate the effect of participatory research approaches on the evolution of local and traditional knowledge.
- Formal education curricula should include, as an important focus, locally-adapted indigenous resource management knowledge (Gyasi et al. 2004a,b).
- The cultural/ ethnic/ geographical origin of extension workers should be considered when preparing programs to work with farmers. There are issues around dialect, terminology, gender and local cultural understanding to consider.
- It is important to consider the full range of local and traditional knowledge related to agriculture, from production planning, cultivation and harvest practices, postharvest handling, to storage and food processing methods.

- The capacity of national and regional local and traditional knowledge networks needs to be developed. Supporting local and regional networks of traditional practitioners and community exchanges can help to disseminate useful and relevant local and traditional knowledge, and to enable communities to participate more actively in the development process. Establishing ‘Local and Traditional Knowledge Centres’ to provide detailed case study information for use in extension, in agricultural teaching – nationally and regionally – and for open access, would be a further useful step.

Challenge: To create innovative approaches to intellectual property rights (IPR) in order to protect local and indigenous knowledge.

Innovative approaches are necessary because existing arrangements are not always applicable to the specifics of local and traditional knowledge. The normal criteria for patenting a process do not exist with local and traditional knowledge. This is because local and traditional knowledge is generally preserved through oral tradition and demonstration rather than written documentation; more often than not it emerges gradually rather than in distinct increments. Only in rare cases is an industrial process concerned; and even in this case an individual inventor is unlikely to be identified. For these reasons it is important that addressing IPR with respect to local and traditional knowledge does not hinder the development and implementation of local and traditional knowledge initiatives that are beneficial for communities and the development process as a whole.

Strategies/ Options

- Encouraging local communities to register traditional practices. Practical, cost-effective and ‘indigenous’ examples of documentation already exist.
- Evolving forms of protection for local and traditional knowledge include Material Transfer Agreements (MTA) involving the provision of material (resources or information) in exchange for monetary or non-monetary benefits. Examples of fair and equitable benefit sharing between users and custodians of traditional knowledge can be found in several countries today. As a minimum registered local and traditional knowledge practices should be referenced and cited when referred to by others in books or training programs.
- Regional agreements can also lead to cost-effective forms of protection for local communities. For example, the 1996 Andean Pact - adopted by Bolivia, Colombia, Ecuador, Peru and Venezuela - empowers the national authority and indigenous communities in each country, who are defined as the holders of traditional knowledge and resources, to grant prior informed consent to the application of their knowledge in exchange for equitable returns.
- Documenting examples of successful technologies developed with the contribution of local communities through their knowledge.

ANNEX 5. THE SURVEY QUESTIONNAIRE

Understanding the Links between Organic Agriculture and Women's Empowerment
A Desktop Study

A study by Jessica Hutchings and Cathy Farnworth

On behalf of the International Federation of Organic Agricultural Movements (IFOAM)

IFOAM intends to facilitate equal participation of women in the Organic Agriculture movement. As one activity aimed at achieving this, IFOAM wishes to understand Organic Agriculture's potential for the empowerment of women.

We need a description and analysis of how (if) participation in organic farming is empowering women, in terms of the "mechanisms" at work, the enabling factors - the conditions, and the risks and challenges that need to be overcome. What causal relationships can be established between participation and empowerment?

Case studies, on both subsistence and commercialized organic farming, should be drawn from a balance of both developed and developing countries.

The nature of the "participation" and "empowerment" described in each case study should be explored either in terms of categories such as "agency" / "structure" / "relations", or in the concepts and words of the women in question. The basic questions are:

How does Organic Agriculture support the expansion of women's ability to identify, pursue and achieve their needs and rights? (Agency)

How does Organic Agriculture promote a more responsive and equitable enabling environment, as embodied in cultural constructs, legal and policy frameworks, economic and market forces, and bureaucratic and organizational forms? (Structure)

How does Organic Agriculture promote more interdependent and accountable relationships between women and the key people and institutions they engage with in pursuit of their needs and rights? (Relational)

⇒ With respect to case studies examining commercialized organic agriculture, we would like to develop an understanding of its risks and opportunities for women, and to understand whether *organic* commercial agriculture can be more advantageous for women than *conventional* commercial agriculture.

⇒ Outline the lessons learned and draw conclusions on how they might be applied elsewhere.

We, the authors, are independent of IFOAM. We do not have any preconceived ideas or expected outcomes. We greatly look forward to thought-provoking and exciting material and discussions: please do not hesitate to say what you what really think.

We have provided a fairly structured questionnaire to help us with analysis later. If you want to ignore the questions and write freely, this is fine. Do please provide as many examples as you can, though.

You will find that some/ many questions are not relevant. Just reply to those applicable to your situation.

We have a short timetable for this exploratory research and so we would be really grateful if you could return the questionnaire by the **14th of January 2009**. This will give us a month for analysis and drafting. Please return your completed questionnaire to Cathy at cathyfarnworth@hotmail.com and to Jessica at J.V.Hutchings@massey.ac.nz.

If you have any questions please contact us. The final report should be produced by mid-February. You will, of course, receive a copy.

Survey Questionnaire on Organic Agriculture and Women's Empowerment

1. Background

Name of Organisation	
Location	
Your name	
Your email	
Postal address	
Website address (if available)	
Chief Type of Farming	
<input type="checkbox"/> Organic Subsistence	
<input type="checkbox"/> Key Crops / Animals	
<input type="checkbox"/> Organic Commercialised	
<input type="checkbox"/> Key Crops / Animals	
If applicable, name of Organic / Fair Trade certifying body	
If applicable, key markets (local or international)	
If you or your organisation is not directly involved in farming, please indicate your role in the organic chain (processing, retailing etc).	
Please tell us about anything special about your work, your situation or your location/ country that you believe is relevant to this study.	

2. Defining Women's Empowerment in Relation to Organic Farming

- i. Does your organisation/ do you have a definition of women's empowerment? If yes, please provide it.
- ii. How do you think organic farming/ food chains and women's empowerment relate to one another? Please write freely.
- iii. What, if any, are the main factors and/or risks preventing the development and implementation of a women's empowerment agenda in organic farming/ food chains? Please explain as fully as you can

3. Decision Making (Agency)

For the purpose of this study agency refers to people's capacity to define their goals and act upon them.

- i. In your experience, how does the participation of women in organic farming/ food chains enable them to increase their agency/ decision-making capacity? Please explain and give examples.

- ii. Sometimes women feel excluded from particular spaces, such as product markets and training sessions. If you have experienced this/ think this is true, please describe and then explain how you think women's ability to speak out in such spaces can be enhanced.
- iii. Is your organisation / are your partners, making active choices to strengthen the voice of women producers, processors and traders?
 - a. If yes, please explain how this is being done.
 - b. If no, please explain the barriers to active choices being made.
 - c. Please elaborate on how you are made aware of the '**choices**' available to strengthen the voice of women producers that are available to your organisation/partners.
- iv. We are particularly interested in examples of how men have been supportive of increasing women's agency (through encouraging them to go to meetings, join cooperatives, take on leadership positions etc). If you have examples, please explain *why* men have been supportive.
- v. Fair and Organic

Some organisations are jointly certified. If you have Fair Trade and Organic Certification, please tell us the impact this has had on women's empowerment.

We now turn to a more detailed examination of agency, first through considering the effects shifting from a largely subsistence farming system to a largely commercialised organic system may have upon the expression and realisation of agency. We then ask you to compare the effects of involvement in organic versus conventional farming. Please answer those sections relevant to you in as much detail as possible. We have provided a table for you to structure your responses. You can write freely if you prefer.

Commercialized Organic Agriculture, based upon legally recognised certification, vis-a-vis Subsistence Farming

Have you noticed any changes in women's access to, and control over, resources as a consequence of shifting to market-orientated organic farming from a subsistence-based farming system?

Please elaborate as much as you can. You can write below the table if you feel the categories do not fit, or need expanding. If you are a processor or retailer (etc) please fill in as appropriate and explain further below.

We particularly need to know WHY changes have occurred. Please help us understand the enabling factors for women's empowerment in your case study, and the risks and challenges that need to be overcome.

Table 1: Commercialised Organic / Subsistence Organic Farming

Potential Impact	Details
Increase/ decrease in household food security.	
Changes in women's roles in value chains (i.e. are they taking on new roles such as processing, storage, marketing etc, and if so, which/ why)	
Changes in the spaces where women can speak freely (such as training sessions or markets).	
Changes in women's access to, and control over, income, land, machinery, labour, crops and animals (both subsistence and market) and other assets.	
Changes in the way women relate to markets.	
Changes in the gender division of labour.	
Changes in women's ability to generate income for her personal and household use.	
Changes in women's decision making power and overall standing in the household and in the community.	
Changes in the areas in which women considered are knowledgeable and are seen as experts.	
Other (please insert)	

More information if you wish

Commercialized Organic Agriculture vis-a-vis Commercialised Conventional Agriculture

Have you noticed any changes in women's access to, and control over, resources as a consequence of switching to market-based organic farming from a conventional farming system?

Please elaborate as much as you can. You can write below the table if you feel the categories do not fit, or need expanding. If you are a processor or retailer (etc) please fill in as appropriate and explain further below.

We particularly need to know WHY changes have occurred. Please help us understand the enabling factors for women's empowerment in your case study, and the risks and challenges that need to be overcome.

Table 2: Commercialised Organic /Commercial Conventional Farming

Potential Impact	Details
Increase/ decrease in household food security.	
Changes in women's roles in value chains (i.e. are they taking on new roles such as processing, storage, marketing etc, and if so, which/ why)	
Changes in the spaces where women can speak freely (such as training sessions or markets).	
Changes in women's access to, and control over, income, land, machinery, labour, crops and animals (both subsistence and market) and other assets.	
Changes in the way women relate to markets.	
Changes in the gender division of labour.	
Changes in women's ability to generate income for her personal and household use.	
Changes in women's decision making power and overall standing in the household and in the community.	
Changes in the areas in which women considered are knowledgeable and are seen as experts.	
Other (please insert)	

More information if you wish

4. Structure

For the purposes of this study 'structure' refers to the political, cultural economic and social frameworks that Organic Agriculture operates within.

- i. What specific changes have been made in your organisation's structures to enable the empowerment of women?
- ii. A question for indigenous communities: we are interested in whether the political, cultural, economic and social 'structures' that your organisation interfaces with (a) perpetuates colonial thinking, or (b) values indigenous knowledge and practices pertaining to organic agriculture. Please comment if relevant.
- iii. Has your involvement in Organic Agriculture enabled a more equitable environment to develop, one that is responsive to the needs of women participants and partners? Please provide some examples.

5. Relational

For the purposes of this study 'relational' refers to interdependent and accountable relationships between women and other key players and institutions.

- i. What relationships have evolved for women that did not exist prior to their involvement in organic agriculture? Please describe.

- ii. In what ways do the actors you are involved in work towards ensuring a more interdependent and accountable relationship between women at various levels, and the key people and institutions they engage with?
- iii. Who are chiefly targeted by external partners for discussion and capacity development – women or men? Please explain as much as you can about the key actors involved, what happens, and why.

6. Taking the Agenda Forward: Women's Empowerment in Organic Agriculture

Please tell us the key lessons you want us to take forward.

ANNEX 6. THE GENDERED NATURE OF VALUE CHAINS

The value chain approach strengthens business linkages between producer groups, service providers, and other actors, such as processors and importers, rather than focusing exclusively on farm interventions. Value chains vary in complexity and in the range of actors they draw in. Export value chains tend to be more complex than local chains in terms of the knowledge and technical facilities required, since special processing and packaging are common.

Frequently the knowledge and other information embodied in the different functions of a value chain is gender specific. In some cases, women or men are entirely responsible for a whole value chain or significant aspects of it. In Madagascar, for example, men produce honey and wax, whereas women are largely responsible for silkworm production. Hives are located high in trees and harvested by night (climbing at night is not considered a suitable activity for women). On the other hand, silk production and weaving can be performed at home, enabling women to run these enterprises more easily.

Project support needs to recognize that in such cases women and men hold specific understandings of crops and livestock, their associated ecosystems, and the market. Interventions may erode the responsibilities of one gender unwittingly, and in the process it may also erode important ecological and social knowledge. For instance, in Quechua communities in Peru, the conservation and reproduction of different plant varieties, such as potatoes, is almost exclusively performed by women. Quechua women farmers are key decision makers, deciding which plant varieties meet specific nutritional needs, what crops to sell, and what crops to consume. The growing privatization and enclosure of land has circumscribed women's ability to plant "low-value," traditional crop varieties, however. Important sources of food and income for the household are being lost, along with knowledge of local plant varieties and their uses accrued by women over millennia (USAID 2006).

Women and men may also perform specific tasks along a value chain. Consequently they will have gender-specific knowledge related to that value chain—for example, knowledge of particular elements of a crop's lifecycle and its requirements at that stage. The separation of tasks by gender may mean that neither men nor women possess a complete understanding of the whole value chain and of how the roles and responsibilities of different actors intersect and interact at different stages. In fishing communities in Sao Tome and Principe, for instance, men catch fish and maintain fishing tackle and boats. Women purchase the catch directly from the fishermen. They transport and market the catch, and in some cases transform it into dried or salted fish (IFAD undated).

In some cases the gender division of labor may appear to proceed harmoniously and result in a good product. In other cases, if men or women have little understanding of the requirements of the next stage in the chain, gradual losses in product quality and quantity along the chain will yield a relatively poor product. Interventions aimed at adding value through processing and marketing need to consider how to increase understanding between chain actors, identify

which gender may benefit at which stage, and determine whether women can be drawn into those activities which add the most value.

Understanding the rationale behind gendered roles in value chains is useful for planning interventions. A study in Uganda (Yawe 2006), based on the experience of a group of women fishers, observed that women on open water were associated with misfortune (and indeed, women fishers were less able than men to challenge thieves of boat engines and tackle). Based on this information, the study recommended that aquaculture, as opposed to capture fisheries, be promoted to evade cultural taboos and enable women to pursue a livelihood in fisheries. Women would need permission from men to build ponds, however, since women rarely own land. The study enumerates several measures that project managers could undertake to help women overcome such obstacles and become fishers themselves.

Projects and programs seeking to create value chains, as opposed to supply chains, therefore need to help male and female actors understand their specific roles in relation to others' roles. They will then learn how value is added, fulfil their particular roles more responsibly, and take on new roles.

ANNEX 7. RESPONDENTS TO SURVEY QUESTIONNAIRE

NAME	AFFILIATION
Vanaja Ramprasad	The Green Foundation, Bangalore, India IFOAM World Board
Zakir Hossein and Shaila Shahid	Krisoker Saar - Farmers' Voice, Bangladesh
Percy Tipene	Chair of Te Waka Kai Ora, New Zealand
Karen Mapusua and Adi Maimalaga Tafuna'i	Women in Business Development Inc (WIBDI), Samoa
Christina Ehgartner	Universität für Bodenkultur, Vienna, Austria
Marta Chiappe	Ing. Agr., Ph.D Prof. Agregada, Dpto. de Ciencias Sociales Facultad de Agronomía, Universidad de la República, Uruguay
Edith van Walsum	Director, ILEIA, Centre for Information on Low External Input and Sustainable Agriculture, The Netherlands
Irene Guijt	Learning by Design, The Netherlands
Laura-Anne Minkoff	Department of Geography, University of California, Berkeley, USA
Norman Messer	IFAD (International Fund for Agricultural Development), Italy

REFERENCES

- AGSF (Agricultural Management, Marketing, and Finance Service). 2005. "Gender Impacts of Small-farm Commercialization on Household Resource Management and Livelihoods. AGSF Working Document, Food and Agriculture Organization (FAO), Rome. Available at http://www.fao.org/ag/agS/publications/docs/AGSF_Working_Documents/gender_agSF3.pdf.
- Altieri, M. 1989. Rethinking Crop Genetic Resource Conservation: A View From the South. *Conservation Biology*. 3 (1) 77-79.
- Awa, N. 1989. Underutilisation of Women's IK in Agricultural and Rural Development Programs: The Effects of Stereotypes. In Warren, D., Slikkerveer, L. and Titlols, S. (eds) *Indigenous Knowledge Systems: Implications for Agriculture and International Development*. Studies in Technology and Social Change Program (11) 3-9. Ames, Iowa, State University Research Foundation.
- Badri, B., and Badri, A. 1994. Women and Biodiversity. *Development*. (1) 67-71.
- Bardasi, E., C.M. Blackden, and J.C. Guzman. 2007. "Gender, Entrepreneurship, and Competitiveness in Africa." Chapter 1.4 of *Africa Competitiveness Report 2007*. Washington, DC: World Economic Forum, Bank, and African Development Bank. Available at <http://www.weforum.org/en/initiatives/gcp/Africa%20Competitiveness%20Report/2007/index.htm>.
- Bellon, M. R. 2006. Crop research to benefit poor farmers in marginal areas of the developing world: a review of technical challenges and tools. CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources, Online ISSN 1749-8848).
- Berkes, F., and Folke, C. 1994. *Linking Social and Ecological Systems for Resilience and Sustainability*. Paper Presented at the Workshop on Property Rights and the Performance of Natural Resource Systems. Stockholm Sweden. The Beijer International Institute of Ecological Economics: The Royal Swedish Academy of Sciences.
- Booth, H. 1999. *Gender Database for Agriculture and Resource Management Policies in Pacific Island Countries*. RAP Publication 1999/7, FAO Regional Office for Asia and the Pacific, Bangkok.
- Brush, S. B (2000) *Genes in the Field: On-Farm Conservation of Crop Diversity*, Boca Raton: Lewis Publishers.
- Charlier, S., Yépez del Castillo, I., & Andin, E. (2000) *Payer un prix juste aux cultivatrices de quinoa: un éclairage 'genre et développement' sur les défis du commerce équitable dans les Andes boliviennes*. GRAIL-IED. Tournesol Conseils, Bruxelles.
- Chiappe, M., & Flora, C.B. (1998) Gendered Elements of the Alternative Agriculture Paradigm. *Rural Sociology* 63 (3): 372-393.
- Christine von Weiszäcker, course lecturer at Schumacher College, UK (01/01): key informant interview.
- Cunningham, A. 1991. Indigenous Knowledge and Biodiversity. Global Commons or Regional Heritage? *Cultural Survival Quarterly*. 15 (2) 4-8.
- Darnhofer *et al.* (2009) Conventionalisation? Organic farmers bite back! Call for Papers. Theme 2: The Rural Bites Back – Working Group 2.6. XXIII Congress of the European Society for Rural Sociology. Vaasa, Finland, on 17-21 August 2009. Convenors. Julien Blanc, Ika Darnhofer, and Stéphane Bellon http://www.esrs2009.fi/2_6.html.
- Davis, M. 1997. *Biological Diversity and Indigenous Knowledge*. Research Paper No. 17, 1997-98, Information and Research Services. Department of the Parliamentary Library, Canberra.
- Di Falco, S. and J.P. Chavas, 2006. Crop genetic diversity, farm productivity and the management of environmental risk in rainfed agriculture. *European Review of Agricultural Economics*, 33: 289–314.
- Ellis, A., C. Manuel, and C. M. Blackden. 2006. *Gender and Economic Growth in Uganda: Unleashing the Power of Women*. Directions in Development, Washington, DC: World Bank.
- FAO (Food and Agriculture Organization). 2006. *Agriculture, Trade Negotiations, and Gender*. Prepared by Zoraid Garcia, with contributions from Jennifer Nyberg and Shayama O'waise Saadat. Rome: FAO. Available at <ftp://ftp.fao.org/docrep/fao/009/a0493e/a0493e.pdf>.
- Farnworth, C. R. & Goodman, M. (2007) Growing Ethical Networks: the Fair Trade Market for Raw and Processed Agricultural Products, with associated case studies on Africa and Latin America. Paper prepared as contribution to the World Development Report 'Agriculture for Development', 2008. RIMISP - Latin America Center for Rural Development. www.rimisp.org

- Farnworth, C. R., Jiggins, J. & Thomas, E.V. (2008b) 'Creating Food Futures: trade, ethics, and the environment'. Gower, London. ISBN 978-0-7546-4907-6 (October 2008)
- Farnworth, C. R., Jiggins, J. and Gurung, B. (2008a) My Practice is My Strategy: how personal values survive in organisations. Journal 'Organisations and People' (Association of Management Education and Development).
- Farnworth, C.R. & Jiggins, J. (2006) CGIAR /PRGA PPB Monograph 4: Participatory Plant Breeding and Gender Analysis (ISBN 958-694-054-3) CGIAR, Columbia.
- Farnworth, C.R. (2008a) 'Module 5: Gender and Agricultural Markets' in Gender in Agriculture Sourcebook. World Bank (September 29th, 2008).
- Farnworth, C.R. (2008b) *Report on IFAD Value Chain Mission to Bangladesh*. Unpublished.
- Frost, D. (2003) Preaching Conversion: the organic conversion information scheme in Wales, 1996-2001. Presented at the *European Society for Rural Sociology, 20th Biennial Conference, Sligo, Ireland, 19-22 August 2003*.
- Gender Advisory Board of the United Nations Commission on Science and Technology for Development. 2004. "Regional Consultative Expert Workshops: Understanding the Gender Dimensions of Biotechnology Research and Development." Gender Advisory Board, University of Pretoria, National Commission on Biotechnology (Pakistan), and International Development Research Center (Canada). <http://gstgateway.wigsat.org/ta/gdrbiotech-final.pdf>. Accessed January 2008.
- Gliessman, S., Garcia, R. and Amador, M. 1981. *The Ecological Basis for the Application of Traditional Agricultural Ecology in the Management of Tropical Agro-Ecosystems*. 7(3) 173-175.
- Gurung, C. 2006. "The Role of Women in the Fruit and Vegetable Supply Chain in Maharashtra and Tamil Nadu India: The New and Expanded Social and Economic Opportunities for Vulnerable Groups Task Order under the Women in Development IQC. USAID, Washington, DC.
- Hine, R., Pretty, J. and Twarog, S. (2008) *Organic Agriculture and Food Security in Africa*. UNEP-UNCTAD Capacity-building Task Force on Trade, Environment and Development. United Nations. New York and Geneva.
- Hutchings, J and Tipene, B. 1997. *Maori Environmental Performance Indicators*. Ministry for the Environment: Wellington.
- Hutchings, J. 2003. Te Ukaipo Te Whakaruruhau – Mana Wahine and Genetic
- Hyndman, D. 1992. *Ancient Futures for Indigenous People: Cultural and Biological Diversity Through Self-Determination*. Paper Presented at the International Symposium on Indigenous Knowledge and Sustainable Development. Silang, Phillippines.
- Hyndman, D. 1994. Conservation Through Self-Determination: Promoting the Interdependence of Cultural and Biological Diversity. *Human Organisation*. 53, pp 3.
- IFAD (2008) Food Security, Poverty, and Women: Lessons from Rural Asia." www.ifad.org/gender/thematic/rural/rural_1.htm. Accessed January 2008.
- IFAD (n.d.) "Sao Tome and Principe: Participatory Smallholder Agriculture and Artisanal Fisheries Development Program: Women Fish Traders." Internal Document.
- Jiggins, J. 1994. *Changing the Boundaries: Women Centered Perspectives on Population and the Environment*. Island Press, Washington DC.
- Kasente, D., Lockwood, M., Vivian, J., & Whitehead, A. (2000) *Gender and the Expansion of Non-traditional Agricultural Exports in Uganda*. UNRISD Occasional Paper 12. Geneva, Switzerland.
- King, S., Carlson, T. and Moran, K. 1996. Biological Diversity, Indigenous Knowledge, Drug Discovery, and Intellectual Property Rights. In Brush, S. and Stabinsky, D (eds) 1996. *Valuing Local Knowledge: Indigenous People and Intellectual Property Rights*. Island Press, Washington DC. pp 167 – 185.
- Mancini, F., A.H.C. van Bruggen, and J.L.S. Jiggins. 2006. *Evaluating cotton Integrated Pest Management (IPM) Farmer Field School outcomes using the sustainable livelihoods approach in India*. Expl. Agric. (2007), volume 43: 97–112.
- Marsden, M. 1988. *The Natural World and Natural Resources: Maori Value Systems and Perspective's*. RMLR Part A, Working Paper 29. Ministry for the Environment: Wellington.
- McMahon, M. 2002. *Resisting Globalization - Women Organic Farmers and Local Food Systems*. Canadian Women Studies / Les Cahiers de la Femme 21/22 (1).

- Mead, A. 1997. *Resisting the Gene Raiders*. New Internationalist. August.
- Modification. PhD Thesis. Victoria University Wellington.
- Mulemwa, J. (1999) *Scientific, Technical and Vocational Education of Girls in Africa: Guidelines for programme planning*. Section for Science and Technology Education
- Muschler, R. 2004. *Agricultura orgánica para aliviar la pobreza de pequeños productores: evaluación de impactos del proyecto piloto FIDA-GTZ en Honduras y Guatemala y bases para el seguimiento en América Central*. Informe de consultoría. IFAD 2004, internal document.
- Posey, D. 1996. *Traditional Resource Rights. Prepared for the World Conservation Union*. IUCN.
- Punch, K. 1998. *Introduction to Social Research: Quantitative and Qualitative Approaches*. Sage Publications, London.
- Quiroz, C. 1997. Biodiversity, Indigenous Knowledge, Gender and Intellectual Property Rights. *Indigenous Knowledge Monitor*. 2 (3).
- Ramprasad, V. Undated. Women and organic vegetable cultivation.
- Ramprasad, V. Undated. Women in Organic Production.
- Robinson, G. 1998a. Qualitative Methods. *Human Geography*. 1988 pp407-432.
- Rocheleau, D. 1991. Gender, Ecology, and the Science of Survival: Stories and Lessons from Kenya. *Agriculture and Human Values*. 8(1/2)156-165.
- Saugeres, L. (2002) 'Of tractors and men: masculinity, technology and power in a French farming community'. *Sociologia Ruralis*. Volume 42, Number 2, April 2002, pp. 143-159(17)
- Section for Technical and Vocational Education. Working document 1999. UNESCO.
- Sen, A.K. (1990) Gender and Cooperative Conflicts. In Tinker, I. (ed.) *Persistent Inequalities*. Oxford University Press, Oxford.
- Shiva, V. 1998. *Biopiracy - The Plunder of Nature and Knowledge*. South End Press: Cambridge
- Shiva, V. 2000. *Tomorrow's Biodiversity*. Thames and Hudson, London.
- Shiva, V. and Dankelman, I. 1992. Women and Biological Diversity: Lessons from the Indian Himalaya. In Cooper, D. Vellve, R. and Hobbelink, H. (eds) 1992. *Growing Diversity: Genetic Resources and Local Food Security*. Intermediate Technology Publications, London. pp44-50.
- Simmonds, N. 2000. *Searching for a Partner*. Unpublished Masters Thesis. Victoria University, Wellington.
- Smith, L. 1999. *Decolonizing Methodologies*. Zed Books, London.
- Trauger, A. (2004). *Because they can do the work: women farmers and sustainable agriculture*. *Gender, Place and Culture*, 11(2): 289-307
- Ulluwishewa, R. 1993. Indigenous Knowledge, National IK Resource Centres, and Sustainable Development. *Indigenous Knowledge Monitor*. 1 (3) 11-13.
- USAID (2006) "Pro-Poor Growth, Gender, and Markets: Creating Opportunities and Measuring Results." Greater Access to Trade Expansion (GATE) Project, Development and Training Services, Arlington.
- World Bank. (2005). "Gender and 'Shared Growth' in Sub-Saharan Africa." Briefing Notes on Critical Gender Issues in Sub-Saharan Africa 2005-1, World Bank, Washington, DC. Available at <http://siteresources.worldbank.org/EXTABOUTUS/Resources/GenderGrowth.pdf>.
- World Bank. (2007a). *Cultivating Knowledge and Skills to Grow African Agriculture: A Synthesis of an Institutional, Regional, and International Review*. World Bank, Washington, DC. Available at http://siteresources.worldbank.org/INTARD/Resources/AET_Final_web.pdf.
- World Bank. (2007b). *Gender and Economic Growth in Kenya: Unleashing the Power of Women*. Directions in Development. Washington, DC: World Bank. Available at [http://www.ifc.org/ifcext/enviro.nsf/AttachmentsByTitle/p_GEM_GenderandEconomicGrowthinKenya/\\$FILE/Gender+and+Economic+Growth+in+Kenya.pdf](http://www.ifc.org/ifcext/enviro.nsf/AttachmentsByTitle/p_GEM_GenderandEconomicGrowthinKenya/$FILE/Gender+and+Economic+Growth+in+Kenya.pdf).
- Yawe, A. (2006). "Unleashing the Potential of Women Entrepreneurs in Export Growth: The Case of Women Fishing and Development Associations in Uganda." http://www.intracen.org/wedf/ef2006/Gender-Issues/Paper_Yawe.pdf. Accessed January 2008.

IFOAM'S MISSION IS LEADING,
UNITING AND ASSISTING THE ORGANIC
MOVEMENT IN ITS FULL DIVERSITY.
OUR GOAL IS THE WORLDWIDE
ADOPTION OF ECOLOGICALLY,
SOCIALY AND ECONOMICALLY SOUND
SYSTEMS THAT ARE BASED ON THE
PRINCIPLES OF ORGANIC AGRICULTURE.



IFOAM Head Office

Charles-de-Gaulle-Str. 5

53113 Bonn, Germany

Phone: +49 - 228 - 92650 - 10

Fax: +49 - 228 - 92650 - 99

Email: HeadOffice@ifoam.org

Web: www.ifoam.org