Methodology and Research Tools for a Gender-Sensitive Value-Chain Analysis

Conceptual Note and VC Framework for future programming in the Caribbean

"Apre`s Bondie, C'est La Ter"
(Dominica's national motto in French Creole: After God is the Earth)

Nidhi Tandon

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I. Outline

The UN Women Multi-Country Office for the Caribbean, is preparing the agency's four year programme on Gender Equality, Sustainable Development and Decent Work for the region, building links with on-going work on social protection in the Eastern Caribbean. UN Women has determined to develop a methodology and research tools around Gender-Sensitive Value Chain Analysis to address these larger systemic issues (equality, sustainability and decent work) drawing on its pilot in onion production with women in Dominica[1].

Following a detailed review of literature and a field visit to Dominica, the overarching objective of this paper is to guide UN Women's future programming in the farm sector; a sector that fulfils multiple functions, including landscape conservation through stewardship and maintenance of natural resources and eco-system services; as well as food and nutrition security, income opportunities and social protection for rural communities. Increasingly the methods of farming are important in how they mitigate and adapt to the effects of climate change.

Consolidating and prioritising these goals is both complex and context-specific – and requires long-term and forward-thinking commitments. Improving gender relations in the decision making, engagement with and sharing of the benefits of sustainable farm sectors will be an important and critical aspect of UN Women's engagement in this sector. The paper is divided into three sections:

Section I: Conceptual framework: gender-sensitive horticultural production[2] in small economies

- The first section outlines a conceptual framework for a horticultural production cycle that captures both monetary and non-monetary values. It proposes forward thinking on growing food for local food systems and for markets drawing from lessons from the Dominica pilot.

Section II: Proposed tools and approaches, indicators and measures of social impacts

- The second section outlines approaches to promoting equitable and sustainable production cycles. Given that this is a highly technical and risk-heavy sector, it outlines the best ways that UN Women could collaborate with the efforts of others to promote a vibrant rural sector.

Section III: Programmatic pillars and key recommendations

- The final section summarizes the guiding principles arising from the research, and discusses the program implications and recommendations for actions on a scale of easy to difficult. Supporting information and some baseline data are provided in the Appendices.

[1] The "Empowerment of Agricultural Women's Movement" project was established by the Dominica National Council of Women (DNCW) and funded by the Canadian Fund for Local Initiatives (CFLI) with additional assistance from (UN) Women.
[2] Refer to Table in Annex: technical definition of agro terms, such as horticulture and agronomic crops

II. Section I: Conceptual Framework

1. Introduction

The private sector[3], social investors[4], NGOs and development assistance donors[5] are applying a more holistic view of best practices and development implications of enterprise development, adding value to farming supplies and sustainable, healthy and viable production cycles. Conventional global value chain analyses have shown serious negative social impacts and externalities[6] and there is growing agreement that agricultural sustainability needs to be measured by more factors than just the economic bottom line. Working conditions for the majority of informal workers in the horticultural global value change have not improved substantially over the last 10-15 years[7]. There is a wealth of new thinking that can be drawn upon to develop a program framework in the food production sector, drawing from value chains that better reflect the costs of negative externalities[8]; that are more 'inclusive'[9], that contribute to healthy source communities[10]; empower 'responsible supply chains'[11] or that integrate Corporate Social Responsibility (CSR) principles.

Some aspects of this emerging thinking and practice hold promise and forward-looking strategies for UN Women's support of women working in this sector. The anticipated outcomes of UN Women's programming in this arena might have impacts that are systemic, relational (e.g. producer processes) and individual, including e.g.:

- Changing gender relations for the better around common development goals, improving mutual collaboration and support for each other in the fresh produce/ cash crop cycle
- Provision of gender-sensitive essential services to producers, promoting deeper investing in the care of people and of ecosystems, prioritizing food nutrition and health links
- Contributing to home-grown decisions on equitable economic growth and environmental health and innovating social protection mechanisms and services

This builds on the findings of a 2011 FAO/UN Women study that suggests: "developing gender-centred policies will ensure higher production and productivity in agriculture, and generate a large number of social benefits. With respect to value chains in particular, the fundamental premise is that paying attention to gender issues can increase production and productivity, speed up the adoption of innovations, raise household incomes, and ensure significant improvements to child health, nutrition and educational levels".[12]

[3] Global mega-corporations such as Walmart Stores and The Coca-Cola Company are developing global supplier diversity and inclusion programs to identify women-owned businesses to supply products and services, at all levels in the food system.
[4] See for instance Root Capital http://www.rootcapital.org/support-us/women-agriculture-initiative
[5] See Care's study (2015) Adding Value to Value Chains – How to unlock the poverty-fighting potential of value chains
[6] See Annex Banana value chain from Ecuador
[7] Man Kwu-Chan (2013) Informal Workers in Global Horticulture and Commodities Value Chains: A Review of Literature. Wiego (Global Trade) Working Paper No 28
[8] Environmental problems and costs directly linked to the overuse of herbicides, insecticides, fungicides and fertilizers are often called externalities as they do not appear in any formal accounting systems. Many agricultural systems are now suffering because key natural assets that they require to be plentiful are being undermined or diminished. (Jules Pretty 2007).
[9] See OECD and World Bank Group report(2015) Inclusive Global Value Chains – Policy options in trade and complimentary areas for GVC Integration by small and medium enterprises and low-income developing countries
[10] See Value Chain Best Practices: Building Knowledge for Value Chains that Contribute to the Health of Source Communities (2008) by Sustainable Food Lab and Ford Foundation, Wealth Creation in Rural American Initiative.
[11] World Economic Forum (2015) Beyond supply chains: empowering responsible value chains
[12] Farnworth (2011) Gender-aware Value Chain Development p.1

2. Foundations and building blocks to capturing 'value'

1) Between 2005 and 2007 sixty countries called for radical changes in world farming when they signed the report of the UN's **International Assessment of Agricultural Knowledge, Science and Technology for Development** (IAASTD)[13]. It reflects a growing consensus among the global scientific community that the old paradigm of industrial, energy-intensive and toxic agriculture is a concept of the past. The report's key message is that small-scale farmers and organic[14], agro-ecological methods are the way forward to solve the current food crisis and meet the needs of local communities. This needs to be an underpinning guiding principle running through all of UN Women's involvement and engagement in this sector, particularly as this is the scale of farming most preferred and most occupied by farming households and over which men and women have more design and decision-making control (relative to large scale farms).

2) Sustainable agro-ecological methods focus on landscape or agro-ecosystem[15] farming methods.[16] Understanding that these systems have multifunctional roles – producing food and other goods for households and markets while contributing to a range of valuable public goods, such as clean water, wildlife and habitats, carbon sequestration, flood protection, groundwater conservation, biodiversity regeneration. Mixed farming is integral to this, while the farmer might focus on two or three crops per season; the reality is that her farm has many different aspects to it. Optimizing production rather than maximizing yield will place equal focus on the productive and reproductive aspects of farming.

3) Socio-environmental values: local sourcing can lead to significant savings in carbon exhaust through shorter and decentralized logistics. In addition, local sourcing has positive spill-over effects on local economies, welfare and decent work:

- Studies show that farmers in long-term contracts and high-value export chains secure more benefits: better product quality, higher yields and overall income;
- Technology transfer plays an important role in creating local wealth through spill-over effects to other crops. In addition, the food security of rural households is improved;
- Training may lead to higher wages through an "efficiency premium" to motivate trained workers to stay with the same buyer in the long term.

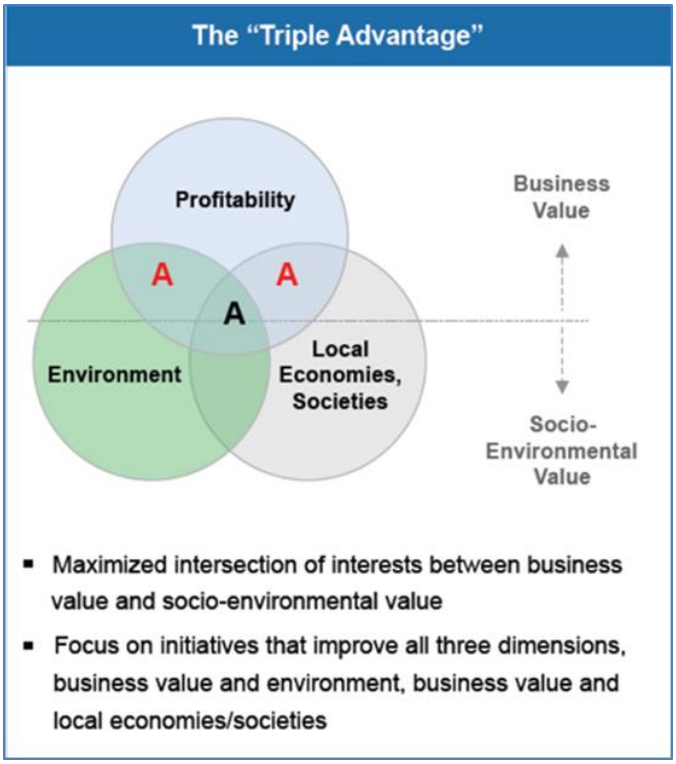
[13] The work of more than 400 scientists over four years, the IAASTD report is a sobering account of the failure of industrial farming. http://www.unep.org/dewa/Assessments/Ecosystems/IAASTD/tabid/105853/Defa. This is the biggest study of its kind ever conducted intended to guide world agriculture development and food production in the coming decades.

[14] See Appendix IX for discussion on organic farming productivity and climate resilience

[15] An agro-ecosystem is a bounded system designed to produce food and fibre, it is also part of wider landscape at which scale a number of ecosystem functions and links with non-farmed habitats are important (Pretty 2007)

[16] The key principles of sustainability are to (i) integrate biological and ecological processes;(ii) minimize the use of those non-renewable inputs that cause harm to the environment or to the health of farmers and consumers; (iii) makes productive use of the knowledge and skills of farmers and (iv) makes productive use of people's collective capacities to work together to solves common agricultural and natural resource challenges. (Pretty 2007) Farming practices are often the best indicator and determinant of environmental quality (e.g. soil, water, biodiversity). Farmers who maintain vegetative cover, soil health and moisture content are essentially building the long term wealth of their natural systems.

Additional social benefits may come through job creation in labor-intensive sectors, e.g. farming. Working conditions are more likely to improve when fair trade standards are applied.[17]



4) Economists tend to see gender dynamics in value chains along two main axes: first, that of scale, from individual interactions at the household (micro level) through clusters of horizontally linked households (meso level) to the level of the value chain (macro level). Second, that of participation- related issues versus factors that govern levels of gains from participation.[18] A third axis needs to focus on the social and care environment. Scale and sustainability as outlined in (1) and (2) can influence the 'triple advantage' or triple bottom line of environment, income and social development. This is represented in a graphic put forward at the World Economic Forum in 2015.[19]

5) Care must be taken in the selection and formulation of business models that are capable of meeting the needs of both host countries and investors. There is scant evidence on the impact of involving foreign investors and agro-industry/supermarket organized value chains on the participation of smallholders in market integration. While some positive experiences emerged recently, the literature suggests that agricultural value chains routinely shed participants or collapse completely, while the degree to which participating smallholders benefit remains uncertain, especially in cases where new business arrangements leave smallholders exposed to risks.[20] The banana value chain in Ecuador for instance serves as an example of the 'value' distribution along the chain. (See Appendix VII). A business model or value chain that is underpinned by local demand can help to mitigate against the risks of being entirely dependent on an export driven market.

[17] http://www3.weforum.org/docs/WEFUSA_BeyondSupplyChains_Report2015.pdf
[18] Cole (2011)
[19] World Economic Forum (2015)
[20] Sustainable Agricultural Productivity Growth and Bridging the Gap for Small Family Farms, Interagency Report to the Mexican G20 Presidency (2012) p.26

3. Horticultural value chain vs. local food systems

6) The horticultural value chain is driven by the market, and in the export market the demand is very specific to weight, taste, and aesthetics. In Dominica the choice of onions or white potatoes is influenced by market need.[21] The governance criteria in Box 1 suggest that many cash crop[22] value chains are at an innovation stage, driven by intermediary donor funds. The pineapple value chain in Dominica is market driven, developed by the NIPPA and taps into available donor support and technical assistance effectively.

> Box 1. Types of Value Chain according to Form of Governance
>
> Market-driven chains where there are no long-term relations between the actors and where the market price is the central governance mechanism. All actors, including the poor, compete in these markets without specific support aimed at facilitating market access and/or guidance from the buyers on quality, quantity or commitment.
>
> Relational chains where transactions occur in the framework of established relations and where the central governance mechanism is the lead actor. Three different types of relational chains have been identified: (i) buyer-driven chains, where a dominant buyer determines what is produced and sold; (ii) producer-driven chains, where farmers, usually through their organizations, constitute the lead actors; and (iii) intermediary-driven chains, where the key linkages are fostered by third parties, usually service providers or social entrepreneurs.
>
> Source: Farnworth (2011)

7) It can be useful to distinguish between family farms producing for local food systems (LFS) vs. producing as a 'node' within a global value chain (GVC). The primary distinction arguably is the LFS system has 'short' supply chains, collaborative relations between buyers and sellers, and an intentional focus on the social, economic and environmental impacts of production, distribution, consumption and disposal of food in the community. Families engaged in a short value chain may have more control over decisions and revenue. Empowering women and men, to take decisions in ways that integrate their varying needs and that enables them to work together to design and benefit from a LFS value chain is very important. So, while UN Women might use the language of value chain, they should try to target value chains that shorten the connection between producers and consumers. Evidence indicates that food produced and consumed locally creates more economic activity in an area than food produced from a non-local source. Direct to consumer farm sales also have a direct correlation with lower levels of mortality, obesity and diabetes, which arguably lower the care costs of the economy.[23] The small economies of SIDs in the Caribbean lend themselves well to the value proposition presented by LFS.

8) According to one OEC website, Dominica's formal imports onions are from the Netherlands[24]. In 2013 this was valued at US$156,000. Additionally Dominica imports sowing seed (90% USA and 10% France). Together they constitute an important and potential import substitute value chain component for the local economy to develop. A food supply chain that relies entirely on an

[21] Author's note: although there does not appear to be a feasibility study for either crop
[22] See Appendix II and III for definitions
[23] Lamie, D, Rebecca Dunning et al, Local Food Systems in the South: A Call for a Collaborative approach to Assessment in Choices: 4th Quarter 2013
[24] Refer to Appendix for further data. This does not, however, account for informal regional trade carried out in catamarans.

imported seed is open to vulnerability. Dominica is classified as mid-level food-secure country (see Appendix) with potential to grow more.

9) The inclusive business models were first discussed at a FAO forum in 2008.[25]

4. Working with the family farming unit

"The agrarian transition to an input-intensive, capitalized form of agriculture is deeply gendered. Food security depends on combating overt discrimination against women, but this shall only be viable if combined with a redistribution of roles in the household". Olivier De Schutter, UN Special Rapporteur on the Right to Food[26]

10) In some smallholder farming systems, the production and marketing may be managed by women and men taking on specific roles. The separation of tasks by gender may mean that neither men nor women have complete control of the entire chain. Working with men and women to track production records through to the commercial aspects heighten value chain effectiveness.

Box 2: Dominica pilot findings (i)

Gender differences on the farm

There are some discernible gender differences in the small farm sector. Until recently men were more likely to cultivate 'heavier' crops like yam, dasheen (together they are referred to as the insurance crops) bananas or crops with longer time lines requiring less care, like cocoa. Women tend to gravitate towards more labour intensive but lighter crops that they find easier to manage including some small root crops (sweet potato) and vegetables. Onion growing is labour intensive, requiring regular watering and weeding. Women will pay male labour for physically demanding tasks such as tilling the soil.

Lately there have been more men moving into horticultural production, it is unclear if this is driven by commercial interests or by a desire to diversify to a wider range of crops alongside food security interests.

11) Considerable potential exists to improve small family farm productivity with existing technology and practices. To be profitable, however, sustainable intensification requires dynamic and efficient input and output markets. It also requires that smallholders, both women and men, have access to such markets and to the information needed to be able to participate effectively in them.[27]

[25] See http://www.fao.org/fileadmin/templates/est/AAACP/FAO_Business_models_for_Small_Farmers_2008_1_.pdf and http://www.fao.org/docrep/017/i3125e/i3125e00.pdf

[26] https://blogs.oxfam.org/en/blogs/recivilization-of-men-by-women (accessed 12.12.15)

[27] Sustainable Agricultural Productivity Growth and Bridging the Gap for Small Family Farms Interagency Report to the Mexican G20 Presidency (2012) p.38

5. Integrating values of time and care into the production VC

12) Most research regarding commodity chains neglects to integrate informal reproductive and regenerative work, these are considered externalities along with environmental costs.[28] According to the ILO definitions, an "informal job" is any job that falls outside the framework of regulations.[29] This may occur either because: (a) the enterprise in which the job is located is too small and/or not registered under commercial law; and/or (b) the employment status associated with the job is "atypical" and is therefore not specifically covered by labour legislation, or labour legislation has not been tested in application to that type of job.[30] "Owners of informal enterprises are own account workers and employers who own informal sector enterprises. The most common types of owners of informal enterprises found in the focus value chains are smallholders (i.e., owners of small-scale farming enterprises), small-scale processors and small scale traders"[31]

Box 3: Dominica pilot findings (ii)

Social returns on investment

"As a woman, I gain strength from the group. Men feel they can pursue their business objectives on their own but women gain strength from working in a group, despite having to manage the challenges of group dynamics". (Interview notes)

"Our group membership fee is pooled together as a group fund. Members can tap into this in time of need. One mother had to fly her son to Guadeloupe for an emergency operation and borrowed from the fund" (Interview notes)

13) Understanding what constitutes productive labour needs to be broadened and deepened. The care of people and the care for the environment define people's realities, their local community and local economy. This is work that is essential not only to the health and nutrition of family members, but also to the maintenance of the agricultural workforce. Yet it is work that is unremunerated, unrecognized, and largely invisible and is usually work done primarily by women. The IAASTD report suggests that all actors along the value chain needs to internalize as many externalities as possible.

14) Women sit in the middle of families and communities as connectors and caregivers across generations; they have capacity to create shared value. The central premise behind shared value is that the competitiveness of a company and the health of the communities around it are mutually dependent.[32]

[28] Collins (2014) p. 28

[29] At the most fundamental level, most workers in commercial packhouses, processing units, and on commercial farms do not have written contracts: for example, research conducted by Oxfam (2004) found that the majority of workers on Chilean fruit farms did not have a written contract. Moreover, the majority of workers are not permanent, but rather are employed on a seasonal, temporary or casual basis; thus, a United States Agency for International Development (USAID) study on the export artichoke sector in Peru (GATE 2007) found that 79 per cent of all men and 84 per cent of all women working in processing plants and on artichoke farms have insecure jobs (Chan 2013)

[30] Chan (2013)

[31] Ibid. p. 4

[32] https://blogs.oxfam.org/en/blogs/potential-of-women-suppliers Oxfam blog The Potential of Women Suppliers

15) Recommendations to G20 governments to promote human capital development and agricultural productivity growth for smallholders, women and men alike, and with particular attention to youth, suggest support for continued provision of targeted, well-designed and gender-sensitive social safety-net programmes that meet the immediate food and nutrition needs of smallholders and their households, and that also help reduce risks and costs associated with the adoption of more productive and sustainable practices and technologies.

16) In order to effectively invest in human capital, governments must integrate long-term solutions with immediate food security measures that empower farmers to invest. Well-designed social protection safety nets programmes and interventions can play a critical role, in enabling the transition to sustainable intensification, especially if they are well integrated with policies aimed at promoting transformational changes and at enhancing agricultural productivity. Labour-based, —productive safety nets such as public works or —food-for-assets programmes can empower poor farmers to increase their productive potential, enhance local infrastructure such as irrigation systems, and contribute to ecosystem restoration and local resilience.

17) FAO's work on social protection focuses on supporting governments and other partners to maximize synergies between social protection and agricultural policies and in articulating a coordinated strategy for rural development. This involves developing human and institutional capacities to manage policy processes, providing direct policy and programming advice, generating actionable knowledge, facilitating and engaging in policy dialogue among stakeholders working in different sectors, and developing analytical and policy tools.[33]

Box 4: Dominica pilot findings (iii)

Market Metrics (Costs of production)

Group membership fee	XCD 20.00 p.m.
Clearing land (US 110.00)	XCD300.00 p.acre
Seeds	XCD 350 per lb.

Natural Farming and Water Solutions

Weeding (per day)	XCD 30.00 – 50.00

(One farmer paid a total of XCD 1000.00 for labour, her earnings from the 2014 harvest came to XCD 800.00)

In 2013 one farmer ordered seeds at USD100.00 per lb. According to this farmer the seeds were bought in St. Kitts but came from Asia. In 2014 the price increased and she now buys seeds in Antigua at USD150.00 per lb. but did not know where the seeds originated from.

[33] Source: FAO PtoP (From Protection to Production) Recognizing the linkages between social protection and agriculture see http://www.fao.org/economic/ptop/en/

6. Developing the seed stock and ending the waste chain

18) There is growing conflict and imbalance between traditional farmer seed systems and the commercial seed sector. Seed laws in many developing countries have changed in the last decade to support the emerging private sector, very few countries have explicit exemptions for farmers' traditional seed systems, which make marketing of farmer's seeds technically illegal. The concept of farmers' rights, adopted in the International Treaty on Plant Genetic Resources for Food and Agriculture (PGFRA) recommends the involvement of farmers in policy development and gives farmers the right to save, use, exchange and sell farm-saved seed. Countries may need to review their seed laws or regulations to take into account national needs and priorities.[34]

19) About a third of food produced for human consumption is wasted or lost globally, with over 40% of the losses in developing countries[35] taking place at the post-harvest and processing stages. Improved post-harvest systems require more than technological solutions. Human capacity to manage the VC including preservation, conservation, safety and quality control, processing, packaging, storage, distribution and marketing. An approach that links R&D to technology dissemination, advisory services, infrastructural development, capacity building and innovation in all segments of agricultural VCs where losses may occur is needed.[36] The Dominica pilot illustrates how important it is to build the capacity of women to not only tend to horticultural production, but to oversee harvests, keep records of harvest weights, curing and storage. This is a first step to then enabling them to assess and control the quality of the harvest and then, to be able to negotiate a market price.

Box 5: Dominica pilot findings (iv)

Losing control of the harvest

The experience of the Castle Bruce onion group has important lessons. Six women and one man (who leased the land to the group) were brought together around the onion crop for two seasons (2013 and 2014). Out of an initial group of 12, only 6 remain, 5 had been engaged in the banana export industry. Six women were involved in the harvesting, but 'never knew how much was harvested'. This was a loose group brought together around the project with no previous experience of working together and lack of coordination and accountability.

The total 2014 harvest was never weighed or recorded. While the quality of the harvest was high, some onions were divided among the group for consumption but the bulk of the harvest got spoiled in the rain and was never cured leading to unnecessary waste and lost earnings. No proceeds of sale have been divided among the group from the harvest sold in 2014 as of December 2015. Group dynamics, leadership training and basic record keeping and accountability were needed. The group still carries XCD 300.00 'debt' for clearing the land.

In comparison, a different farming group, the core members of which had schooled and grown up together, had a better record in accountability, transparency and harvesting not on communal plots, but on individual farms. Working with existing, sometimes informal, groups and networks has proven to be more successful than initiating them from scratch, as levels of trust rise with time.

[34] See p.35 Improving Agricultural Innovation Systems and Adoption of Innovations for Sustainable Productivity Growth. In Sustainable Agricultural Productivity Growth and Bridging the Gap for Small Family Farms, (2012)
[35] See Appendix VIII for details
[36] Ibid p.44

7. The "Value Sphere" at the farm level

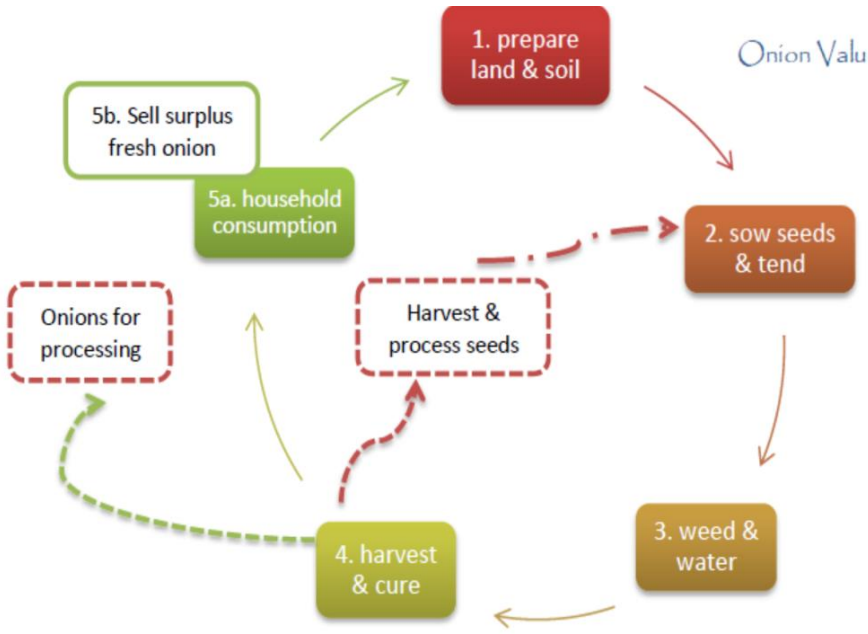


Figure 1: From value chain to a value sphere

a) Steps 1 to 5 are newly established (2013 and 2014), steps 4-5 were less successful in 2014 than in 2013 (lower harvests compounded by onions not cured in time)

b) Immediate capacity to develop a seed harvesting capacity to minimize dependence on imported seeds needs to be further researched (presented in red dashed arrows)

c) Long term capacity to produce sufficient onion surplus for sauces, condiments, dehydrated and flake processing needs feasibility study (presented in green dashed arrows)

d) The 'chain' is presented as a regenerating cycle but currently there is no link between (4) and (2)

The 'beginning' of the farm level value chain is the seed and the soil, but caring for the soil and regenerating seed is also the 'end' of the production sphere This suggests that VC terminology could shift from a 'chain' to something that better represents feedback loops or natural regenerative cycles. In venture capital there has been reference to Spheres or Ecosystems of value. A Value Sphere (VSPh) may represent a cyclical ecosystem / environment that farming families may be better able to manage, and minimize and anticipate risks. Climate resilient farming methods are an integral part of the VSPh ecosystem.

8. Strategic intervention areas and possible actions within the conventional value chain

Based on onion value chain studies elsewhere, some key strategic intervention areas and respective actions have been formulated; this is not necessarily for UN Women direct intervention but simply a way to understand the different levels of intervention[37].

Strategic intervention areas	Actions
1. Strengthen seed production and distribution	▪ Promote cooperation between research institutes and (potential) seed producers /multipliers; ▪ Analyze the possibilities for seed certification; ▪ Study possibilities of seed production ▪ Study the possibilities (and desirability) of transforming (small) informal seed producers into formal producers; ▪ Analyze the applicability of voucher system for onion VC financing
2. Public-private partnerships in onion processing	▪ Analyze possible processing options (examples in other countries, market demand); ▪ Lobby for private food processing plants in processing onion (dried onion, onion powder as a spice); ▪ Organize exchange visits to enhance ideas on processing options; ▪ Bring topics to the attention of the Stakeholder Platforms; ▪ Facilitate market survey on consumer preferences / willingness and (monetary) capacity to buy 'new' products like dried onion. ▪ Explore the possibility of Government supported incentives for group processing
3. Strengthen link between producers and markets, between different actors in the VC	▪ Introduce VC concept at relevant levels in Min. of Agriculture ▪ Collect additional information (gender disaggregated) of costs / expenses incurred by different actors ▪ Collect additional information on number of actors involved in the VC (to improve the mapping) ▪ Analyse in detail the role and function of the coops, as well as their skills and training needs ▪ Obtain information on requirements participation in tenders ▪ Create stakeholder platforms (or link with any existing groups) at local and regional level for trust building, strengthening of linkages and relationships between input suppliers, producers, cooperatives, processors and /or other buyers ▪ Produce material and facilitate training for Stakeholder Platforms and other key actors in order to disseminate information and knowledge on VCD ▪ Promote sorting and grading by producers ▪ Radio broadcastings with relevant information for VC actors

[37] Modified from The Value Chain Analyses of Onions. Agro-BIG. Accessed 12 November 2015. http://www.agrobig.org/onion.htm

	▪ Facilitate increase of storage facilities ▪ Confirm that the transport capacity is sufficient (quantity, quality, reasonable price, also at peak harvest periods); if not, discuss possible solutions; also look at transport from field to collection point ▪ Increase knowledge among producers and traders of market trends and consumer needs ▪ Establish exposure & training programmes to encourage effective organizations, and promote formation of farmers groups, associations, cooperatives etc. (including study tours to central markets, talks by wholesalers, meetings with associations in other areas, hands on training courses) ▪ Develop ICT technologies along the value chain to strengthen value chain organization and information; ▪ Collaborate with development organizations and donors supporting onion growing smallholders ▪ Identify new outlets in main urban market centres and with institutional buyers in the region
4.Strengthen services in onion Value Chain	▪ Facilitate the improvement of supply of services e.g. via the Stakeholder Platform meetings (presentation of finding of quality, timeliness, etc. of services) ▪ Encourage an improved responsiveness of fertilizer and chemical input suppliers
5. Finance onion VC	▪ Use of available funds and credit lines for further development of onion VC ▪ Establish training programme for value chain actors & organizations along the VC in the development of action plans & applications for funds address problems & opportunities including the development of new and improved technologies ▪ Conduct training in business plan development ▪ Develop training programmes to strengthen the record keeping, business planning and action planning capacity of cooperatives and associations ▪ Facilitate and partner with MFIs and NGOs to fill the appropriate finance demand of the smallholders
6. Introduce location based onion quality control mechanisms	▪ Facilitate the development of location-based onion quality control mechanisms with emphasis on seed quality ▪ Promote quality and standard based pricing of onion
7. Agronomic practices	▪ Collect additional information on agricultural practices (disaggregated for male/female farmers) ▪ Collect more information on reasons for low use of fertilizers ▪ Collect more information on labour constraints (when, which activity, etc.) ▪ Elaboration of manual for agricultural practices for onion cultivation ▪ Support the training of farmers to produce and store onion seeds on their farms ▪ Identify tailor made training and demonstrations for and by value chain actors – to introduce new relevant technologies i.e. input supply, post-harvest technologies, on farm practices, irrigation etc ▪ Train Development Agents to provide tailor-made services ▪ Support for establishment of demonstration centres at local levels.

8. Processing facilities	▪ Implement training and demonstrations for processing technologies, marketing and ITC technology; ▪ Develop bank guarantee scheme to ensure access of processors to finance; ▪ Promote value addition and enhance the linkages of small urban town with the rural producers; ▪ Support actors in the VC to develop action plans & applications to be funded through the Innovation, Research & Demonstration fund. These should include the whole chain from improved inputs, certified seed varieties, production and post-harvest technologies, to processing technologies etc.; ▪ Identify gaps in technology or techniques that could be supported with innovative new products, equipment or techniques; ▪ Improve incentives for upgrading agro-processors and smallholders' alike, entailing reductions in the risk of adopting new technologies, selling of new markets and trusting other value chain actors. Use the demonstration and innovation funds to buy-down the risks of upgrading without distorting support service markets.

III. Section II: Proposed tools and approaches, indicators and measures of social impacts

9. A Joint-Partnership Approach with Rural Sector Development Agencies

20) Much of the supporting or enabling environment for horticultural value chain systems can also be about developing local food systems. Both value systems hold potential for positive economic, social and environmental benefits for communities, depending upon the abilities of those communities to access information, develop constructive relationships, manage risks and share the benefits of this collaboration. In other words much of the 'tools and approaches' required are about developing social capital.

21) For UN Women to be able to apply a business case for decent work and economic empowerment; a food security value proposition as well as the kind of social capital value needed to boost gender equity, it will need to bring together the technical, financial and cross-sectoral partners around a common goal and common measures. "Overcoming gender inequality will not result from specific isolated programs, but from a comprehensive approach that involves multiple sectors and stakeholders".[38]

22) This report recommends that UN Women adopt a Collective Impact (CI) approach to supporting gender sensitive value spheres in a sustainable rural sector. Collective Impact is the commitment of a group of actors from different sectors to a common agenda for solving a specific social problem. "Donors, companies and NGOs need to focus on identifying and tackling these complex and inter-related issues when planning value chain interventions"[39]. Organizations like Bioversity, CGIAR Consortium, FAO, IFAD, IFPRI, IICA, OECD, UNCTAD, the Coordination team of UN High Level Task Force on the Food Security Crisis, WFP, and the World Bank will need to work closer with UN Women at the regional level to determine next steps.

23) In order to identify and target those most able to participate in and benefit from VC, VSPh and local food systems, the agency is best advised to work directly with local Grassroots Women's Organizations (GWOs). In Dominica a number of fledgling groups are in need of further support and formalization. One practical recommendation is that institutional support has a planning grant phased approach to the larger grant. The GEF small grants program[40] for instance dedicates USD 2,500.00 towards the planning component of the total grant, which enables the grant recipient group to structure develop a community project plan, establish records and community indicators.

[38] World Bank Group (2014) Gender at Work: A companion to the World Development Report on Jobs. p.10
[39] CARE (2015) p.14
[40] See Appendix

10. What to measure and which indicators to use

24) Traditional economic measurements are under close scrutiny. The international standards used to measure and compare development include gross national product (GNP) or gross domestic product (GDP) and national income, labour productivity and wages. GDP growth – the world's preferred yardstick for measuring progress - does not capture many vital aspects of national wealth and well-being, such as direct changes in the quality of health, education, and changes in the quality and quantity of natural resources[41] nor does it account for the distribution of wealth among population groups within countries. Both GNP and GDP measurements are criticized for their apparent lack of accounting for environmental degradation and resource depletion. Annual natural capital losses, are typically estimated at an unimpressive few percentage points of GDP. "If, however, the natural stocks upon which the livelihood and welfare of the poor depend are included, then we are talking about fifty percentage points and more; a figure they would find impossible to replace".[42]

25) Environmental and social values are not well served by markets. Regulation through policies and financial instruments as well as collective action can help change market attitudes and behaviour to optimize pro-poor development, minimize negative externalities, and ensure that benefits are equitably shared and human rights respected. The private sector is exploring different ways to capture value – one example is Shared Value; a management strategy focused on companies creating measurable business value by identifying and addressing social problems that intersect with their business. The shared value framework creates new opportunities for companies, civil society organizations, and governments to leverage the power of market-based competition in addressing social problems.[43]

26) The benefits of disaggregating data by gender are substantial. According to data published by the World Bank, 62% of projects that included substantial gender indicators delivered positive outcomes, as compared to only 30% of those projects that did not include gender indicators.[44]There are a range of cross-cutting qualitative and quantitative issues that gender indicators could address:

- At the monetary level: how much money, dollar for dollar, actually reaches women and men at the household or local levels and decision making around disbursement, use, investment and reinvestments;

[41] The zero draft Outcome of Rio+20 (i.e. the basis for Member States' negotiations) reads: "We also recognize the limitations of GDP as a measure of well-being. We agree to further develop and strengthen indicators complementing GDP that integrate economic, social and environmental dimensions in a balanced manner. We request the Secretary-General to establish a process in consultation with the UN system and other relevant organizations."

[42] TEEB –The Economics of Ecosystems and Biodiversity for national and International Policy Makers – Summary Report: Responding to the Value of Nature 2009, UNEP, p.5; see also: The EU's Beyond GDP process which is piloting an environmental index for use alongside GDP and launching macro indicators to communicate key issues on sustainable development.

[43] The concept was defined in the Harvard Business Review article "Creating Shared Value" (January/February 2011), by Professor Michael E. Porter and Mark R. Kramer who argue that all profit is not equal. Profit involving shared value enables society to advance and companies to grow faster. They predict that incorporating societal issues into strategy and operations is the next major transformation in management thinking. Since the article was published, Creating Shared Value (CSV) has gained credibility, legitimacy and momentum as a new way of doing business. The concept is embraced by corporations like Nestle, Intel, Unilever, The Coca-Cola Company and Western Union, and the framework and language of shared value has spread quickly beyond the private sector to governments, NGOs, civil society and academia.

[44] WWB (2013)

- At the empowerment level: how many women and how many men are actively involved and engaged in reaching those decisions and in enacting on those decisions; how many women participate in determining a valid indicator that best captures change for them;
- At the environmental/ecological level: how are men and women involved in the decisions and actions around stewarding natural resources for future generations, how secure is their relative access to natural resources;
- At the gender-differentiated level: what kinds of gender-differentiated evidence, perspectives, narratives and realities are captured, recorded and learned from.

1. Referencing the SDG indicators

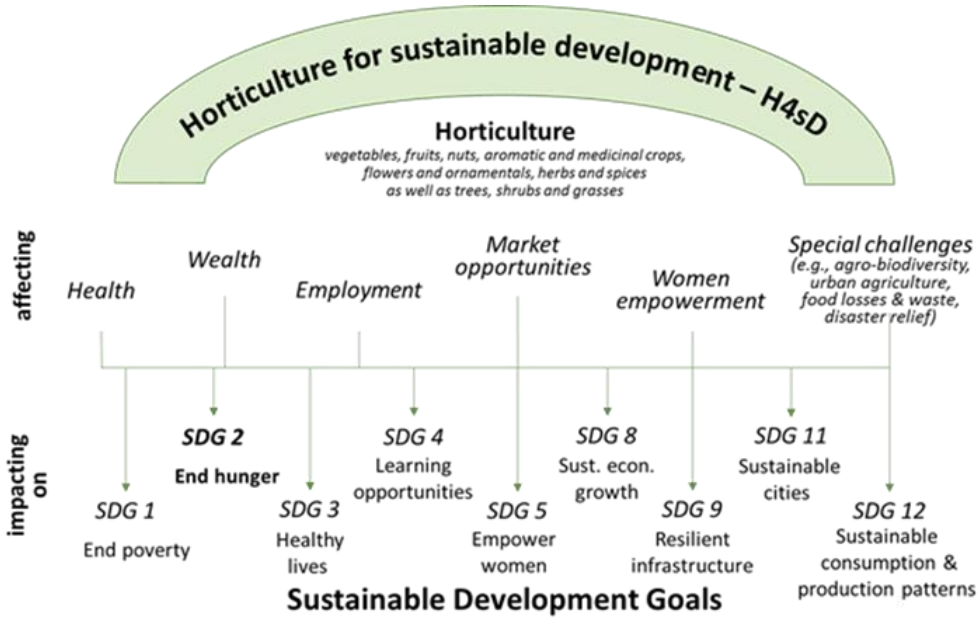


Figure 2: Horticulture for sustainable development – H4sD

27) Reviews of the MDGs to date suggest that along with set targets and goals it will be important to ensure that the processes for reaching those targets in a post 2015 agenda are redesigned to shift away from the serial compartmentalization of the social sectors towards integrating them more systemically with each other and within the broader goals of economic, environmental and social development. This will require different approaches to track progress across sectors. In a post 2015 sustainability agenda for instance, health concerns will need to be covered more holistically to include the complex links between, for instance, health and education, food systems and climate change and move beyond targeted diseases and maternal health concerns to a more comprehensive universal health coverage system that provides for quality health as a human right from cradle to grave. The post 2015 principles under discussion relate to integrated approaches to development, equality, human rights and resilience – building environmental sustainability as a fundamental factor

in human development and well-being. The H4SD figure[45] might be useful in terms of guiding key indicators to track change. It suggests that economic and social indicators need to be framed by ecological systems.

2. FAO Database set on small farmers

28) The FAO's Smallholder Farmers' DataPortrait, a smallholder-specific data set based on Living Standards Measurement Study surveys (LSMS) and the FAO Rural Income Generating Activities data (RIGA) will be key to UN Women's work in the sector. These surveys are designed to collect data on dimensions of household welfare, including consumption, income, savings, employment, health, education, fertility, nutrition, housing and migration. Their main objective is to assess the living conditions of the population, and to illustrate household behaviour. This dataset, built on information in the form of censuses and household surveys, provides a comprehensive, systematic and standardized profile of smallholder farmers across the world.[46]

3. Placing values on work

29) The value of work, and in particular, the value of women's work is under renewed scrutiny. This coincides with ongoing attempts to redefine economic terms and measures of value. Time banking for instance, is a form of recognized community values that can be exchanged for other services. There are important parallels and linkages between women's social reproduction (care) work and their productive activities in the local food economy. Unpaid care work and local food production entail a systematic transfer of hidden subsidies to the rest of the economy that go unrecognized.[47] Taken as a whole these sit within the frames of societal pubic goods, the informal economy, decent work and public policy on social security (including health, food security and sustainability and security for future generations). Root Capital refers also to 'hidden influencers' in the value chain.[48]

30) There have been attempts to shift the design of development indicators away from being tools of measuring ODA impacts towards being tools to assist governments undertake governance reforms or tools that engage communities in determining and measuring their own impact – empowering them in the process. UNDP[49] developed a framework for determining pro-poor and gender sensitive indicators using the International IDEA's Democracy Assessment Framework to derive four senses in which a gender sensitive governance indicator might be understood as (i) disaggregated by sex; (ii) gender specific; (iii) implicitly gendered, and (iv) chosen separately by men and women. This framework is completed by presenting three tools for shaping the demand for pro-poor and gender sensitive indicators. These include (i) a set of key questions directed to different areas of governance; (ii) a process flow chart, which may be used to identify indicators for elections, the criminal justice system and the national budget; and (iii) an integrated indicator matrix, which provides an overview of where gender sensitive and pro-poor indicators are needed. By engaging

[45] www.globalhort.org
[46] FAO (2015)
[47] ILO Working paper #86 Unpaid care work
[48] See Appendix XV
[49] UNDP Measuring Democratic Governance: A framework for selecting pro-poor and gender sensitive indicators (2006)

farming families in determining community indicators, UN Women might be able to design specific indicators that measure the value of decent productive and reproductive work.

4. Measuring multiple impacts, agency and empowerment

31) There is an expanding methodological 'toolbox' for gendered value chain analysis providing 'how to' guidance for researchers. The prevalent approach of comparative gender analysis in value chains is the use of descriptive case studies and the growing literature that describes the gender dynamics in value chains reflects this.[50] In order to capture a holistic impact on value chain and food production, UN Women will need to consider combined indicators that track both economic and non-economic dimensions (summarized in the table below).

Economic (monetary) dimensions	Non-monetary dimensions
Economic equity	Decision making equity
Paid work by men and women	Unpaid work by men and women
Diversification to additional chains or different stages	Bio-diversity to manage adaptation, regeneration and reproductive care
Ability to absorb economic risks	Ability to make sound decisions around risk
Sharing in benefits of economic value	Create social and environmental values

32) The Women's Empowerment in Agriculture Index (WEAI) [51]measures the empowerment, agency, and inclusion of women in the agriculture sector in an effort to identify ways to overcome those obstacles and constraints. The Index is a significant innovation in its field and aims to increase understanding of the connections between women's empowerment, food security, and agricultural growth. Attempts to measure women's empowerment and agency are presented in aggregate indices such as the Gender, Agriculture, and Assets Project (GAAP).[52]

33) Women Organizing for Change in Agriculture & Natural Resource Management (WOCAN) has established six main domains: income and assets, time, health, food security, leadership, education and knowledge against which indicators for its W+ Standard (formerly the Women's Carbon Standard) are organized.[53] The W+ criteria have been developed through a consultative process with stakeholders that included communities in Asia and Africa, and expert reviewers to form the basic requirements of the standard. Each application of the standard will measure how well a project meets these criteria through the validation or verification process. These are the requirements that will be used to evaluate a project's conformance and to determine how the project has improved the quality of life for women in the community.

50 Coles, Christopher and Jonathan Mitchell (2011) Institute

51 The WEAI is a survey-based index designed to measure the empowerment, agency, and inclusion of women in the agricultural sector and was initially developed as a tool to reflect women's empowerment that may result from the United States government's Feed the Future Initiative see: IFPRI (2012) http://www.ifpri.org/publication/women-s-empowerment-agriculture-index

52 IFPRI/IRLI (2012) GAAP Gender, Agriculture, & Assets Project: A Toolkit on Collecting Gender & Assets Data in Qualitative & Quantitative Program Evaluations

53 Women Organizing for Change in Agriculture & Natural Resource Management. See http://www.wplus.org/

34) Women's World Banking (WWB)[54] has over thirty years' experience in designing financial services for poor women; there is much to be gleaned from this record. Important to note is that in order to develop relevant Gender Performance Indicators WWB (i) defined the priority areas that *women themselves* value; and (ii) these findings were based on the bank's extensive *qualitative* research on women clients. While these indicators have been developed specifically for the micro-finance industry – they hold applicable lessons for CFs. Its 2013 report makes very clear that "The first step that an institution should take to start measuring gender performance is to ensure there is alignment across the entire organization on the integration of a gender focus". Targets and incentives must align to this strategic priority. It goes on to say that the most important way an institution can drive improvements in data quality is by using the data. WWB has coordinated closely with the industry's social performance community, including the Social Performance Task Force, (SPTF) Universal Standards for Social Performance Management, (USSPM) Smart Campaign's Client Protection Principles, and the Pro-Poor Seal of Excellence. WWB pursues a three-way track[55] in developing its indicators: (i) A client-centric focus; (ii) an institutional focus; and (iii) financial and social outcomes. WWB defines its client-centric focus as: "A client-centric analysis allows institutions to thoroughly understand the performance and needs of clients because they are able to link social and demographic information to the overall financial behavior of the client, not just to a particular product".[56] The client-centric indicators are categorized under outreach, products, service quality and client protection. The institutional focus looks at staff composition through all levels within the organization and its trends in terms of staff promotion and attrition by gender. It's three financial and four social outcome indicators are quantitative and do not include environmental or ecological indicators (other than the condition of homestead).

35) An analysis of gender impacts of the Noel Kempff Mercado Climate Action Project in Bolivia found that while the project focused on women's practical needs (e.g., health, education, income-generation and food production), other "strategic gender needs" were not addressed that could "empower women, challenge the existing gender division of labor, and bring about greater gender equality."[57] Eligibility requirements for participation, such as minimum landholding size, credit, or formal property rights, may exclude the poorest from taking part in projects and their benefits.[58]

36) Integrate indicators with SROI[59] impact measures by applying sustainability indicators and SROI methodology, rigorous impact assessments in order to learn from mistakes. We need to do this so as to redefine the terms we use to assess progress, to account for costs and to recognize non-economic contributions. As part of project design, determining which indicators to use can have profound implications for project outcomes. Establishing quantitative criteria alone, for instance, has had the unintended effect of excluding entire constituencies of project beneficiaries.

54 Women's World Banking (2013) Gender Performance Indicators: How well are we serving women?
55 Women's World Banking (2013) Gender Performance Indicators: How well are we serving women?
56 WWB 2013 (p.3)
57 Boyd, E. (2002) The Noel Kempff project in Bolivia: Gender, power and decision-making in climate mitigation. *Gender and Development* 10.2: 70-77.
58 Tacconi, L., S. Mahanty, and H. Suich (2009)
59 See Appendix X

IV. Section III: Directional markers and key recommendations

11. Directional markers

37) A coherent program that addresses sustainable rural livelihoods, decent and valued work and long term security will need to ensure that the capacity of farming families to maintain the local food economy is preserved and enhanced, as must their ability to make informed decisions regarding value chain engagement. The principles underpinning future programming are three-fold:

a) Target small-holder producers, family farming and household units, working with and through GWOs. Scale down to the appropriate productive unit by promoting household economy in addition to value sphere level impacts;

b) UN Women should concentrate on working at the community production cycle building participatory planning, supporting women's local capacities to understand and negotiate contracts (including land leasing agreements), better manage risks (financial, natural and other), gain confidence and ability to work better together, before positioning themselves for any GVC enterprise. UN Women can apply its considerable influence to promote better gender relations and policies in the full range of political, contractual, economic or other relationships that help or hinder women's groups or farming clusters;

c) Promote a value 'sphere' perspective that operates through a food sovereignty lens, so as to better position men and women to control inputs, assets and decisions on the outcomes. This includes securing access to use of land for farming purposes. Invest in direct and indirect activities that underpin sustainability through the spread of ecologically sound farming methods, land and water stewardship, ending of waste, and deepen a vested interest in optimizing (rather than maximizing) economic and non-economic benefits. This requires UN Women to adopt a Collective Impact approach to building synergies and common goals within the broader sphere of influence in rural sector development.

There is better potential for a sustainable trajectory of gender equitable investment in and benefits from VC development once men and women are better positioned to join productive forces. As illustrated in the chart in #8 (Strategic Interventions) there is a lot that needs to be developed from a value chain point of view. What can UN Women realistically bring to the table that is an efficient use of its resources? Participatory planning, capacity building and networking underpin much of the ground work that needs support for the next decade. Figure 3 is reproduced here because it helps to map out the range of human and social capital investments required for any nature-based enterprise.

Source: http://www.wri.org/sites/default/files/figure-1.1.preview.png

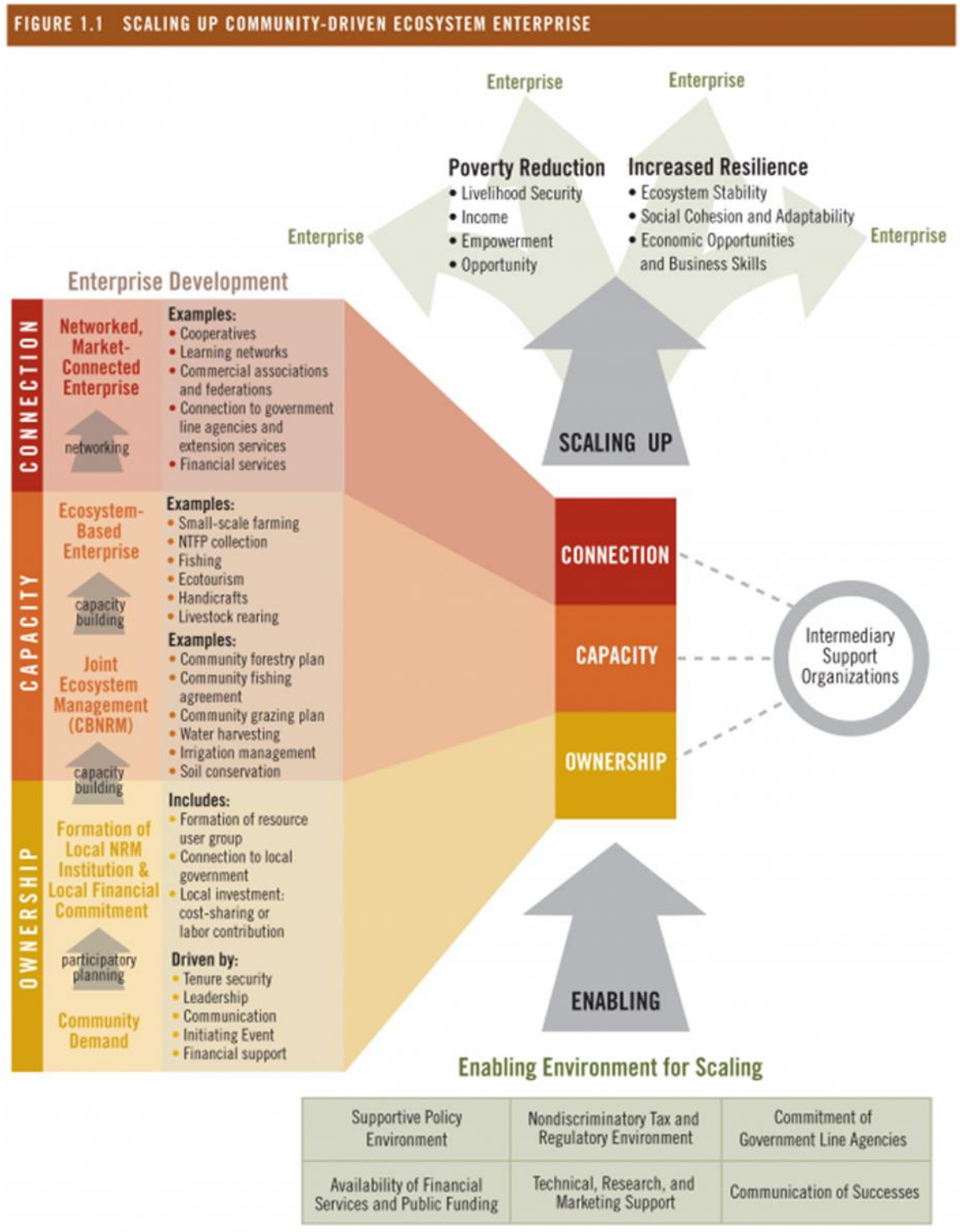


Figure 3: Scaling up community-driven ecosystem enterprise

12. Entry points in the value sphere to optimize productivity

38) UN Women should target value chains that shorten the connection between producers and consumers.

39) Optimize productivity through cultivating social cohesion for gender equity. On a practical level, a stronger collaborative relationship needs to be fostered between representative civil society and farm producer groups, and between men and women in both the formal and non-formal aspects of production and marketing. Stronger collaboration needs to focus on: minimizing and/or spreading/ sharing risks, reducing waste and leveraging capital and knowledge. Some interventions may require appropriate technologies but all of the interventions require sharing and pooling of knowledge and know-how, income diversification strategies, and access to affordable financial products (credit, savings, and insurance) to mitigate their risk[60] sharing the risk up the chain so that buyers are committed to a cost and quantity. Push strategies build capacities, improve skills and strengthen associations while pull strategies improve access to social services and the market.[61] The sharing of resources does not imply the sharing of farm land among families although this is not entirely excluded.

40) "The value chain approach therefore emphasizes a dynamic that has long been recognized: Social capital (networks of relationships and social institutions) are critical to business and competitiveness. In contrast to much enterprise development work in the past, the value chain approach seeks to do more than solve specific identified production and marketing problems. Directly solving problems may create some initial momentum, but building internal capacity to address value chain constraints will empower stakeholders, reduce dependency and ensure sustainability of investment impacts".[62]

41) Working with existing institutions to 'upgrade' the enabling environment –this may involve changes to policy, law, institution and to support organizations. Enabling environment interventions to improve gender equity fall into three main types: a) generic interventions that remove blockages in functions and nodes where women participate (or could participate) strongly; b) specifically gendered codes of practice applying to the way women participate, and; c) positive discrimination to make representation more equitable. Implementation of laws based upon notions of property ownership and collective working can have negative results – for example, market based property rights reform has formalized the exclusion of women. Enabling women to better secure contractual agreements that protect their access to land for instance or their usufruct rights may be more applicable in certain circumstances. Working with financial institutions to promote financial inclusion for small farmers is also important

[60] Care (2015)
[61] Care (2015)
[62] Overview of the Value Chain Approach https://www.microlinks.org/good-practice-center/value-chain-wiki/overview-value-chain-approach#book-anchor-2 accessed 12.14.15

13. Entry points in the value sphere to improve gender relations

42) Improve gender relations while also addressing barriers that women face in particular;

- Women's access to support services, affordable financial services and required inputs and assets as smallholder farmers and businesses;
- Protecting their assets, time and monetary investments in their productive value sphere;
- Supporting GWOs to better organize themselves so as to plan and take control of their own development, interact with local authorities and voice their need for essential infrastructure.

43) Evidence suggests that 'horizontal' coordination can reduce gender-related disparities in bargaining and management power as a precursor to stronger 'vertical' relationships. Improvements in processes, products and functional distribution in value chains can improve chain-level outcomes leading to women's empowerment and, ultimately, to improved household poverty outcomes. However, this progression from positive impacts to desirable outcomes is not a given and depends on often complex context-specific socio-cultural norms. In particular, the benefits of women's participation in agricultural value chains are determined by their control of productive resources and household level decisions. Where both sexes play a role in decision making generic interventions, or even those applied to men only, can benefit both sexes.

44) As independent, small-scale producers on family farms, women must have recognized access to land and other productive inputs. They must be supported by extension services which provide gender-aware advice and whose personnel better represents women. And they must be encouraged to organize themselves into mutually supportive groups that allow them not only to produce better by achieving certain economies of scale, but also to have a political voice.[63]

45) Most farmers' organizations lack the skills and resources to conduct value chain assessments. It is incumbent that the ministry or an independent organization, NGO or Farmers Organisation provides assistance in conducting these assessments for smaller farmers, or build the capacity to enable these organizations to undertake proper production and market assessments.[64]

[63] https://blogs.oxfam.org/en/blogs/recivilization-of-men-by-women
[64] CAFAN (2011) Regional Value Chain Training Workshop

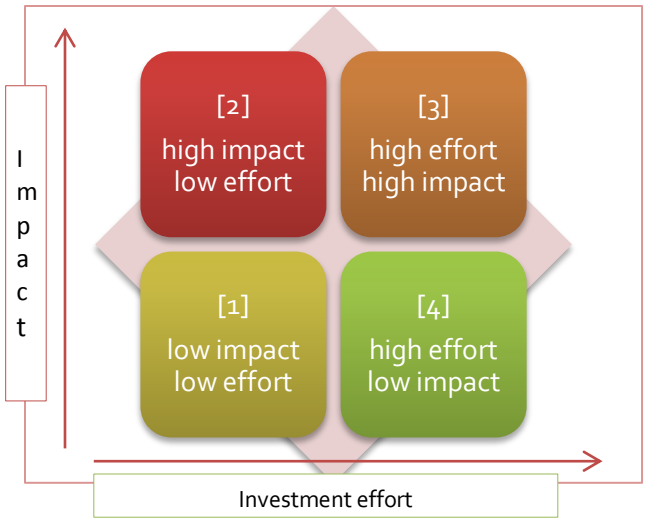


Figure 4: Gender-sensitive VC interventions: priority grid

UN Women will need to determine:

- Its intended impact in the immediate and long term
- What existing programs and initiatives it can leverage
- What level of risk or venture funding it is prepared to undertake
- How much effort it can invest in VC interventions and development.

The priority grid in Figure 4 serves as an index for the suggested practical actions and programs that UN Women may want to consider going forward. Depending upon the indicators selected and on the financial proxies applied to a social return on investment method, UN Women can prioritize its focus. The consultant applies this grid to propose some clear win-wins (high impact, low effort) and suggests steering away from low impacts in relation to effort (#4).

14. Suggested practical actions and programs

Investment to Impact ratio	Strategic intervention	Potential Collective Impact Partners
[1] low impact low effort	▪ Integrate financial education workbook with VC record keeping, tracking and saving goals ▪ Introduce risk self-assessment in VC costs and revenue to potential farming households	National Development Foundation of Dominica Axcel Finance IICA, DNCW, CFLI
[2] high impact low effort	▪ Dedicate a portion of each grant to project or business planning components ▪ Develop simple empowerment indicators with GWOs, build capacity to monitor and record progress, challenges and impacts, establish benchmarks ▪ Gender training at government level and within financial institutions ▪ Integrate gender-sensitive value sphere training in farmer field schools including post-harvest management ▪ Maximize synergies between social protection and agricultural policies through policy change and participatory training	GEF SGP practice WEAI index and W+ IFPRI Ministry of Agriculture, CARDI, DOAM Formal financial institutions FAO's PtoP project
[3] high effort high impact	▪ Advocate for national seed policy that supports local seed enterprise incubation ▪ Advocate for women's access to group insurance mechanisms and financial services ▪ Integrate gender-sensitive climate resilience and adaptation into business development ▪ Intensify training in post-harvest practices ▪ Integrate gender specific productive and reproductive activities into smallholder data ▪ Supplement seed imports with smallholder seed enterprises or formalize seed delivery channels through smaller seed packets (100, 250 or 500 grams) ▪ Work with GWOs to plan, document and measure against project objectives, start a planning scorecard with record keeping and regular monitoring. Develop the value sphere of production to minimize waste and optimize productivity ▪ Review of policies/introduction of new policy to support value spheres and short VCs ▪ Provide information on market access so as to allow small holders to participate effectively in them	Ministry of Agriculture, CARDI, DOAM GEF SGP CFLI IUCN FAO Smallholder Farmers' Data Portrait, IICA, DNCW, Gender Bureau FAO, CARDI, IICA, International Centre for Tropical Agriculture GWOs, farmer groups

[4] high effort low impact	▪ UN Women is best able to assess what capacity it can afford to invest on the ground, and how to lever resources and know-how in the horticultural VC sub-sector. Bringing together women farmers around a crop or a season is likely to have less positive impacts than working with an established group and with several actors bringing training, know-how and support through farmer-field schools etc.	

V. Conclusion

The farming sector in many Caribbean small island economies sits at a decisive juncture, triggered to some extent by the divestment in the traditional plantation export sector. The islands can decide to follow "business-as-usual" practices which will take their ecology, economy and food security down one (disastrous) trajectory, or they can adopt a vision which invests in the country's food economy while shifting the structural foundations of both economy and ecology to better adapt to climate change. The "business-as-usual" practice might continue to favour capital, and input-intensive, technological solutions above all else, and will disregard units of production that are considered economically 'unviable' or of no importance because they do not contribute to conventional measurements of GDP.

In other words, if small-holder family farmers and their productive, regenerative, stewardship and conservation roles are supported to pursue the full extent of their innovation and investment, ecologically sound farming methods that nurture local biodiversity, both commercial and family plots could lead to sustainable farm food in the era of climate change. UN Women is well positioned to work with men and women to improve gender relations within producer households.

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Appendices: Data, Definitions and Additional Information

I. Relevant country data (Dominica)

- The island of Dominica currently depends on agriculture (17.6% GDP), government services (22.3%), financial services (15.7%), and transport & communication (14.3%) as the main drivers behind its economy.
- Poverty remains a leading development issue especially with the past reliance on the banana industry.
- In Dominica, 29% of households and 40% of the general population lived in poverty as per 2003. 11% of households and 15% of the general population lived in indigent poverty.
- An average of 50% of Dominica's children live in poverty. Fewer than half the households with children have two resident parents.
- In rural areas, 1 in every 2 households is poor.
- More than 37 percent of households in Dominica do not have access to piped water and 25% of households have no access to toilet facilities.
- The rate of unemployment for poor households is 40% while non-poor households' rate of unemployment is 16%.

Land distribution and ownership

OECS (1995)	
Type of Tenure (1995)	Percentage of Privately owned Farm Land
Sole Ownership	65%
Family owned	11%
Rented lands	6%
Communal Lands	6%
Squatting or Rent Free	3%
Tenure not stated	10%

Source: http://www.oecs.org/publications/ssdd/unhabitat-project/644-land-policy-issues-of-the-commonwealth-of-dominica/file

Gender Policy

- Government has formally adopted a National Policy and Action Plan for Gender Equity and Equity in the Commonwealth of Dominica. This National Gender Policy was adopted in 2006 as "a critical instrument framework to guide and inform the transformation of existing inequitable gender relations."
- A critical underpinning of Government's gender policies and machinery is that the status of women often affects the status of the household and its male and female children.
- Amendments to inheritance and title by registration legislations in recent past work to the benefit of married women in particular. For example inclusion of the partner of a married couple to a title previously in the name of the other partner only, attracts transfer fees much lower than that of outright sale transfers.
- However specific land policies targeting women have not been formulated and the number of female headed households who do not own land or are squatting is not known.

- The Special Focus Areas Programme as outlined in the Growth and Social protection Strategy 2012-2014 are initiatives to deal specifically with incidence of poverty in identified areas.
- The idea is to "tailor interventions to the needs and circumstances of particular areas…and to consist of a variety of measures and activities that include targeted transfers, community engagement towards self-help and income earning activities, skills training, counselling adult education, access to lands among others, and delivered through an integrated approach."
- Two communities of Layou and Silver Lake were identified to build capacity and empower residents to improve their employability and entrepreneurial opportunities and women have been specifically targeted for assistance with income-generating activities.
- Women were found to be under increasing pressures to obtain employment while shouldering child rearing and domestic duties
- Although the levels of poverty among men and women were the same levels, 28.8 percent for males, and 28.9 percent for females, there were differences in employment levels for males and females.
- The male unemployment rate was 11.1 percent and female unemployment rate was 17.6 percent.
- In fact, both poor and non-poor females faced higher levels of unemployment than males.
- Thus, while 20 percent of poor males were unemployed, the figure for poor females was 33.8 percent.
- With the non-poor, unemployment for males was 8.1 percent compared to 13.0 percent for females as shown below
- Over the period from 2003 to 2009, the Government of Dominica embarked upon several programmes to address needs of vulnerable persons including children, the elderly, and single women. In 2009, the Government of Dominica implemented "Yes We Care" Programme designed to meet the care needs of the elderly. The majority of care givers as well as the beneficiaries are women.

Source:
http://www2.unwomen.org/~/media/headquarters/attachments/sections/csw/59/national_reviews/dominica_review_beijing20.ashx?v=1&d=20140917T100730

II. Common definitions[65]

Horticulture	The branch of agriculture concerned with growing plants that are used by people for food, for medicinal purposes, and for aesthetic gratification. Fruits, vegetables, tree nuts, nursery crops and floricultural crops are all considered to be horticultural crops
Olericulture	The branch of horticulture dealing with the production of vegetables and herbs
Cash crops	Plants grown or managed harvested and sold for cash rather than for sustenance. They are grown for grains, fruits, flowers, foliage, stems, roots, latex or any plant organ which may be consumed or utilized directly (e.g. fruits, vegetables, cut flowers and cut foliage) or processed into such products as fiber, rubber, sugar and biofuel. Any crop can be described as such if it can be harvested and converted to cash for his personal and family needs.
Subsistence crops	Are grown primarily to be consumed by the farmer and his family or to be fed to the farmer's livestock. Literally, the term is applicable where there are farmers who prefer to grow their own crop for sustenance and not for marketing.
Ground provisions	Any starchy agricultural product used as food. Examples include, but are not limited to, yams, potatoes, bananas, cassava, pumpkins, and breadfruit.
Sustainability	Sustainability in agricultural systems incorporates concepts of both resilience (the capacity of systems to buffer shocks and stresses) and persistence (the capacity of systems to continue over long period)

[65] Definitions extracted from http://nifa.usda.gov/sites/default/files/resources/definition_of_specialty_crops.pdf and http://www.cropsreview.com/cash-crops.html and http://wiwords.com/word/ground-provisions

III. Horticultural crops and agronomic crops: main differences[66]

CRITERIA	AGRONOMIC CROPS	HORTICULTURAL CROPS
Ultimate consumers	Human and animals	Human
Harvest stage	Often harvested mature	Harvested at different stages
Consumption	Consumed processed in living state or dried	Often consumed fresh
Moisture content of harvested product	low	high
Aesthetic consideration	low	high
Calories	high	low
Vitamins and minerals	low	high
Life cycle	Semi-annual, annual, few perennials	Semi-annual, annual, biennial, perennial
Cultivar variability	high	low
Adaptation	limited	wide
Management	extensive	intensive
Income per unit area	low	high
Crops classifications	cereal or grain crops, grain legumes or pulses, oilseed crops, pasture and forage crops, fiber crops, sugar crops, starchy root and tuber crops	vegetable crops, fruit crops and edible nuts, ornamental crops, nursery crops, aromatic crops, medicinal crops
Terms for production units	field, pasture, range, forest, plantation	garden, orchard, grove, vineyard, greenhouse, nursery, plantation
Sources: Rimando 2004; Janick 2005; ISHS 2011		

[66] Source: http://www.cropsreview.com/agronomic-crops.html accessed 12.12.15

IV. Typology of food security[67]

Typology of food security			Low Soil Fertility		High Soil Fertility	
Lowest Food Security			*Unfavourable Climate*	*Favourable Climate*	*Unfavourable Climate*	*Favourable Climate*
	Trade Insecure	Low food production				Haiti
	Trade Secure	Low food production				
Low Food Security	Trade Insecure	Low food production				Dominican Republic, Honduras
	Trade Secure	Low food production				
Middle Food Security	Trade Insecure	High food production		Belize, Guyana		Dominica
		Low food production				Antigua and Barbuda, Jamaica
	Trade Secure	High food production				
		Low food production		Netherlands Antilles		St. Vincent and the Grenadines
Upper Middle Food Security	Trade Insecure	High food production				
		Low food production				Bahamas, Barbados, Cuba, Grenada, St. Kitts & Nevis, St. Lucia
	Trade Secure	High food production				
		Low food production		Trinidad and Tobago		
High Food Security	Trade Insecure	High food production				
		Low food production				
	Trade secure	High food production			United States	Belgium, Denmark, France
		Low food production				Malta

[67] Source: http://www.ifpri.org/sites/default/files/publications/ifpridp00945.pdf accessed 12.12.15

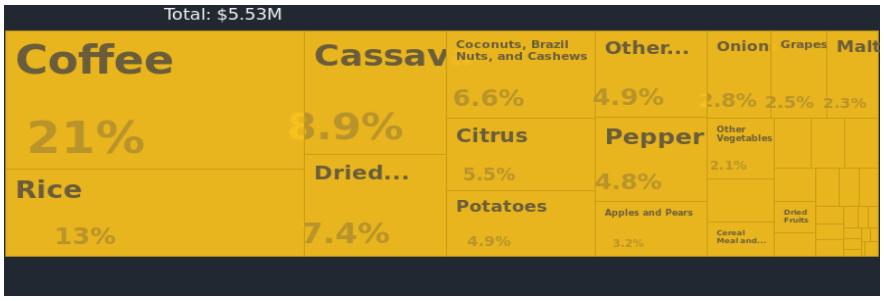
V. Dominica Import Data 2013

Onion imports into Dominica 2013

Onions imports	
HS92 ID	
	0703
Import Value	
	$156k
Import	
	4.54
Percent	
	0.086%

In 2013 100% of Dominica's onion imports were imported from the Netherlands @ US$156,000 out of a total of US$5.53M on vegetable products.[68]

Vegetable product imports



Onions make up a tiny fraction of the total import bill for vegetable products[69]

Dominica Imports by Product Chapter in US Dollars - Vegetable Products – in previous years[70]

Commodity	2005	2006	2007	2008	2009	2010
Onions & shallots, fresh/chilled	$190,506	$209,380	$209,063	$233,436	$199,948	$268,587
Garlic, fresh/chilled	$135,149	$147,408	$152,853	$125,041	$162,761	$295,449
Leeks & oth. alliaceous vegetables, fresh/chilled	$85	$75	$192		$5	$226
Total	**$325,740**	**$356,863**	**$362,108**	**$358,477**	**$362,714**	**$564,262**

Sowing seeds imports into Dominica 2013

Sowing Seeds	
HS92 ID	**Total value imported from France (10% of total)**
1209	3.87K
Import Value	**Total value imported from the USA (90 % of total)**
$38.5k	34.7K
Import	
1.79	
Percent	
0.021%	

[68] Source: http://atlas.media.mit.edu/en/visualize/tree_map/hs92/import/dma/show/0703/2013/
[69] Source: http://atlas.media.mit.edu/en/visualize/tree_map/hs92/import/dma/show/1209/2013/
[70] Source: United Nations Commodity Trade Statistics Database

VI. Review of Gender sensitive value chain analyses to date

The current discourse on gender and value chains places the economic empowerment of women as a central issue although "gendered value chain analysis is very much in its infancy and all researchers and practitioners are on a steep learning trajectory.[71]

So far, gender-sensitive approaches to value chain analysis have focused on (i) understanding women's and men's roles and relationships in the chain (ii) examining gender differentials in access to, and control over, key productive assets necessary for participation in the chain, and (iii) analyzing how gender power relations affect economic rents among actors throughout the chain.[72]

Trends in gender analysis: One explanation of this trend is the growing interest among development donors and agencies in the gender impacts of GVC participation. More fundamentally however, it is also likely to reflect the fact that a gender focus almost forces the adoption of a labour perspective, given women's predominance as employees and unpaid family labour, rather than as entrepreneurs, in GVCs.[73] Gender analysis will show for instance marked horizontal segregation of jobs by gender appears to be widespread in all stages of the value chain, with women tending to be employed in harvesting, peeling/slicing of fruit, sorting, grading and packing, while men were employed in operating machinery, loading and unloading of boxes/crates and other heavy work.[74] Importantly, the literature also indicated that the extent to which horizontal job segregation by gender translated into gender inequality in pay and conditions depended on the country, crop and level in the chain, demonstrating that horizontal segregation does not always lead to women being worse off than men. Nevertheless, several studies also reminded us of the fact that engagement in the focus value chains frequently does not lead to dramatic improvements in household income, since smallholder households typically rely on multiple sources of income, of which export commodity production is only one.[75]

There are perhaps three main thrusts in VC analysis, Global Value Chains (GVCs) are replete with examining the economic case for women's earning options – in the garments, tourism, information technologies and commercial horticulture[76], where women support the value chain as laborers to retailers.[77] In horticulture, women dominate poorly paid insecure causal work.[78] Gender analysis of value chains have focused on labour rights – "given that both women and the poorest members of

[71] Coles (2011)
[72] Farnworth (2011)
[73] Chan (2013)
[74] Chan (2013) p.10
[75] Chan (2013) p.12
[76] "For employers, recruiting women into these relatively labor-intensive types of production presents a number of advantages. Women are considered more docile than men, and more reliable. The nature of the tasks in the emerging export sectors -- fruits and vegetables in particular -- are generally physically less demanding and do not require the use of heavy machinery, and are therefore seen as suitable for women. The wages of women are generally lower than those of men, which employers sometimes justify by the consideration that they are not, typically, the main wage-earners within the family; for the same reason, women are considered a highly flexible workforce, which can be hired on a weekly or seasonal basis". https://blogs.oxfam.org/en/blogs/recivilization-of-men-by-women
[77] See for instance "Capturing the Gains: Women in value chains, making a difference" (2013) Michelle Christian, Barbara Evers and Stephanie Barrientos. In mobile phone factories in China, Women account for 50% of the workforce, in floriculture women account for 75-80% of the workforce.
[78] ibid

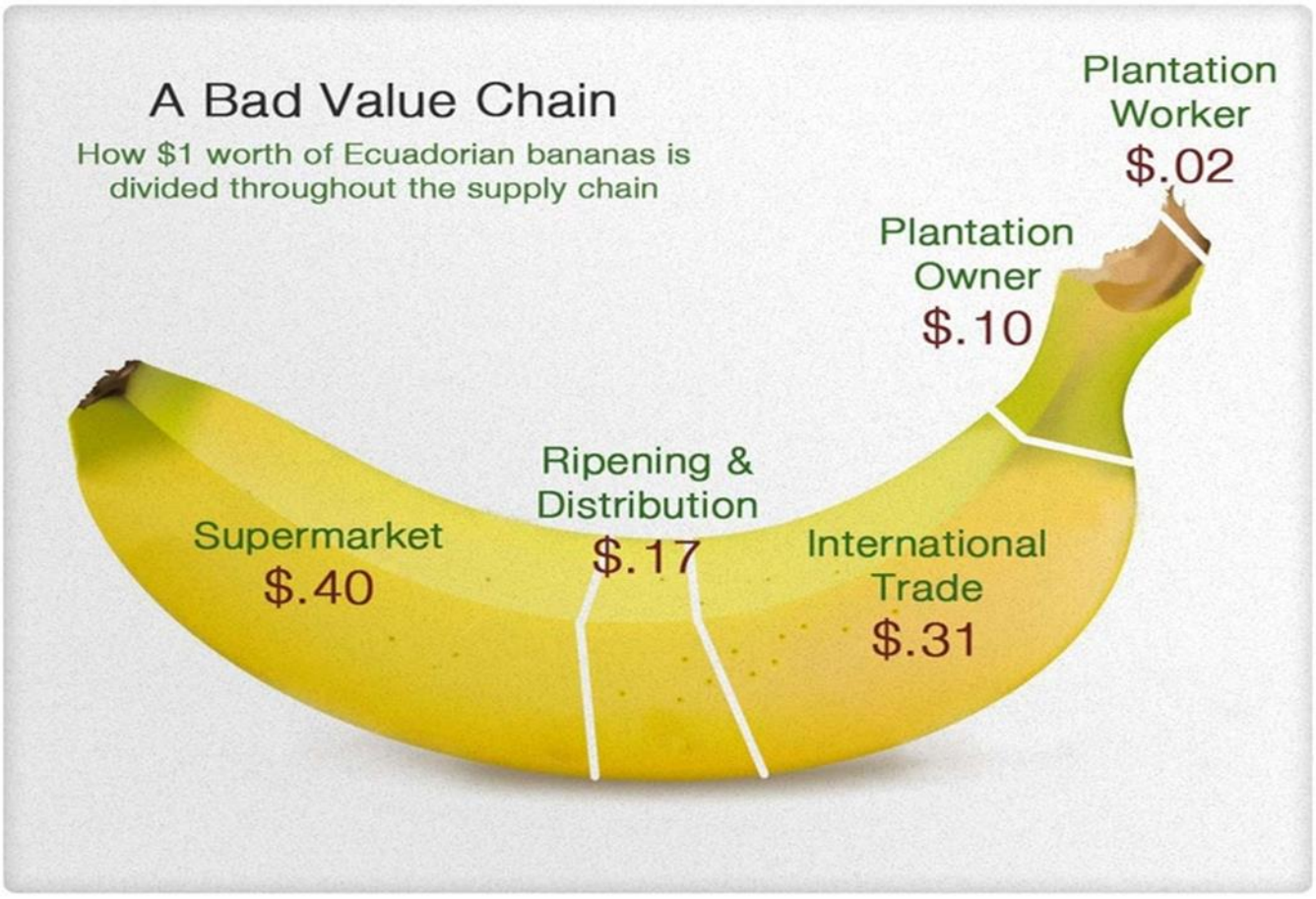
society are typically more strongly represented as workers rather than owners of enterprises within global agricultural value chains".[79]

Gendered labour – manual labour is almost always male and almost always paid for. Women farmers faced with the prospect of paying for this labour might take on the tasks themselves, thereby saving labour costs but ultimately investing their own unpaid labour into the productive cycle. "That women are represented disproportionately in low value chains, and the lower value nodes within them, is an established feature of value chains, and is a particularly strong characteristic of globalized export chains, which are usually more lucrative than the traditionally feminized domestic markets. Men tend to dominate functions with relatively high barriers to entry and correspondingly greater returns (rent), and to control chain management functions" where and how men and women participate in value chains are the determinants of the extent to which they benefit. As with chain participation the factors that determine what benefits accrue to household members through involvement in economic activities operate both within the household and within the value chain itself.[80]

Ten gender tools are available at KIT, Agri-ProFocus and IIRR. 2012. *Challenging chains to change: Gender equity in agricultural value chain development*. KIT Publishers, Royal Tropical Institute, Amsterdam

[79] Chan (2013)
[80] Cole (2011)

VII. Seeking equity in an iniquitous GVC in bananas (Ecuador)



VIII. Data on food waste in the food chain (Caribbean)

The FAO estimates that 6% of global food losses occur in Latin America and the Caribbean and the region lost each year and / or wasted about 15% of their food available, even though 47 million people still suffer hunger.[81] This represents only a fraction of the total losses and waste, as they occur at all stages of the food chain:

- 28% occur at the consumer level
- 28% in terms of production
- 17% in marketing and distribution
- 22% during handling and storage, and the remaining
- 6% at the processing level.

In some African, Caribbean and Pacific ACP countries, where tropical weather and poorly developed infrastructure contribute to the problem, wastage can regularly be as high as 40-50%[82]

There are ways to avoid losses and waste in every link of the chain, primarily through investments in infrastructure and physical capital. It is necessary to improve the efficiency of food systems and good governance on the theme by regulatory frameworks, investment, incentives and partnerships between the public and private sector. The figure below gives the reader a sense of the waste in food chains in the Caribbean.[83] In Mexico, for instance, an estimated 2.6kg of onions go to waste per week.[84]

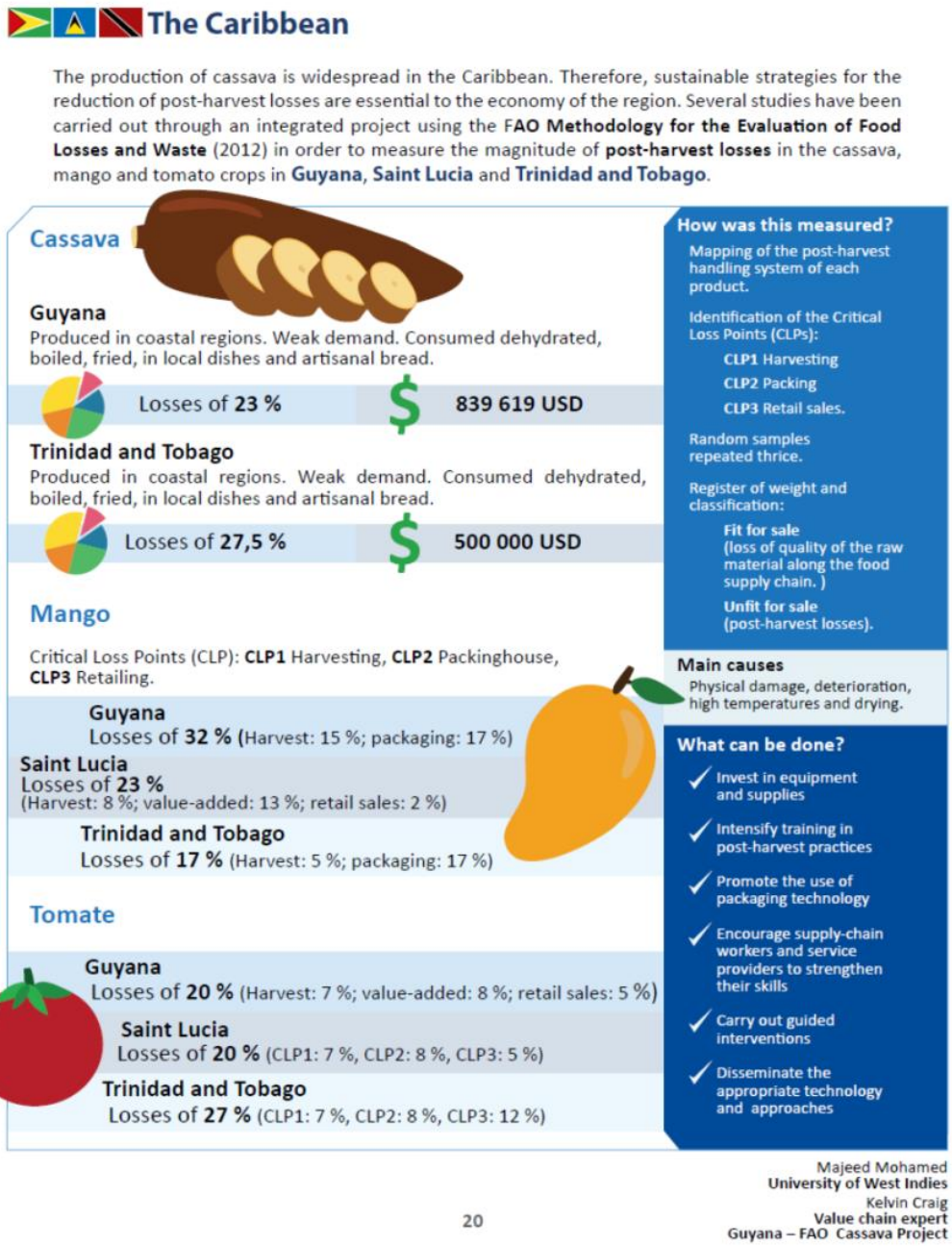
IICA has identified high level of discards in important products for domestic consumption, as high as 40 percent in potatoes in the Andean region and 35 percent in vegetables in Haiti. There are also high losses for export crops such as bananas in Ecuador or pumpkin in the Caribbean countries. Lack of cold chain devices, inappropriate handling and packaging, and lack of market and climate information for producers making them take wrong decisions about what, where and when to plant were identified as main causes. Investments in training, equipment and market information were identified as solutions. The IICA initiative brings partnership agreements between American universities and local organizations and the possibility of bringing international donations for these projects (IICA, 2013).

On the other hand, from the same diagnosis but following a bottom up approach, the root organizations in Latin America are boosting the exchange of information among producers. Movements such as the Campesino a Campesino (CaC) (Farmer-to-Farmer) Programme promote technical exchanges between producers and farmer's. The CaC uses the ancestral knowledge of the farmers producing immediate results in the application of simple technologies. Likewise and with the same philosophy, the peasants' knowledge transmission is supported and disseminated by international organizations such as the Food First Institute. Other important organizations such as La Via Campesina and Action Aid are supporting similar initiatives.

[81] http://www.fao.org/americas/noticias/ver/en/c/239392/ Accessed 10.12.15
[82] SPORE (2011) http://www.actioncontrelafaim.org/sites/default/files/publications/fichiers/technical_paper_phl__.pdf
[83] FAO: http://www.fao.org/3/a-i4655e.pdf Accessed 15.12.15
[84] Ibid p.26

What can be done?

- Invest in equipment and supplies, e.g. low cost cold storage structures for successful longer term storage of potatoes and onions
- Intensify training in post-harvest practices
- Promote the use of packaging technology
- Encourage supply-chain workers and service providers to strengthen their skills
- Carry out guided interventions
- Disseminate the appropriate technology and approach



Capacity building initiatives for food loss prevention in Latin America:

Two FAO Consultants, Dr Majeed Mohammed of the University of the West Indies (UWI), St. Augustine and Mr Kelvin Craig of Guyana facilitated the workshop and provided training to extension officers and researchers on how to conduct an in-depth analysis of post-harvest practices of cassava and tomato. Participants were also able to gain a more complete understanding of the system-wide nature of the quality of deterioration and subsequent losses of crops in order to formulate appropriate solutions for quality management and loss reduction strategies at various Critical Loss Points in the post-harvest handling system[85]. The training has covered a range of crops such as onions, tomato, dasheen, plantain, sour sop, cassava, pineapple, sweet potato, pumpkin, papaya and yard long beans. Other crops being covered include corn and hot pepper.

[85] http://www.fao.org/americas/noticias/ver/en/c/328019/

IX. Organic farming as a food security and ecosystem resilience measure

The FAO recommends organic farming[86] because it "… performs better than conventional agriculture on a per hectare scale, both with respect to direct energy consumption (fuel and oil) and indirect consumption (synthetic fertilizers and pesticides)". Its 2002 report states that organic agriculture[87] enables ecosystems to better adjust to the effects of climate change and has major potential for reducing greenhouse gases. Other positive factors include:

- Organic soils have better water-retaining capacity which explains why organic production is usually more resistant to climatic extremes such as floods or droughts;
- Carbon sequestration in soils is promoted by organic methods due to the addition of compost, mulches, manures and cover crops;
- Where they are certified, organic farming systems require regular and methodical recording of farming data such as compost production and harvest records for organic farm inspectors to monitor. This systematized data collection method lends itself to systematic recording of weather-related data for use by local and national meteorological stations;
- As organic farming comprises highly diverse farming systems, the diversity of income sources also increases, potentially buffering farmers to adverse effects of climate change and variability such as changed rainfall patterns;
- Organic approaches may make it easier to link economic value, cost and payments to future carbon sequestration programmes that seek to offer farmers environmental fees for stewardship of soil, land and biodiversity
- Organic farming offers a low-risk farming strategy with reduced input costs and lower dependence on external inputs such as fertilizers. By extension, this often means reduced financial risk and reduced indebtedness, alongside increased diversity
- Other related benefits include healthy eating, local foods, and lower overall food carbon footprint.

As far as a technical solution goes, this report concludes that 'climate smart' farming can and should include organic farming systems.

[86] The United Nations Food and Agricultural Organisation (FAO) has come out in favour of organic agriculture. Its report Organic Agriculture and Food Security (2002) report explicitly states that organic agriculture can address local and global food security challenges. While some argue that organic farming cannot feed the world, there is evidence that organic agriculture can have large-scale impacts: for example, farmers who practise sustainable organic rice farming in Asia proved that their production is higher and more stable than when they used chemical-intensive farming. Conversion of large-scale production to organic farming could also be relevant, for example to enhance soil fertility and reduce water pollution. However, organic farming is not always synonymous with sustainability. For example, there are very large farms that are labelled organic but are not sustainable. Broader conservation technologies are needed in which all components of the ecosystem are taken into account. Ecologically intensive agriculture can go beyond organic farming and develop integrated solutions based on organic approaches, while also requiring, in certain conditions, external inputs or even biotechnologies.

[87] Organic agriculture guidelines have been detailed in writing over the last 50 years. Since the early 1990s the term 'organic agriculture' has become legally defined in a number of countries. It has its roots in the variously named biodynamic, regenerative agriculture, nature farming and permaculture movements which have developed in different countries.

X. Social Return on Investment as a methodology to value impact

Social Return on Investment (SROI)[88] is a framework for measuring and accounting for a much broader concept of value; it seeks to reduce inequality and environmental degradation and improve wellbeing by incorporating social, environmental and economic costs and benefits.

SROI measures change in ways that are relevant to the people or organisations that experience or contribute to it. It tells the story of how change is being created by measuring social, environmental and economic outcomes and uses monetary values to represent them. This enables a ratio of benefits to costs to be calculated. For example, a ratio of 3:1 indicates that an investment of $1 delivers $3 of social value.

SROI is about value, rather than money. Money is simply a common unit and as such is a useful and widely accepted way of conveying value.

The stages in SROI

Carrying out an SROI analysis involves six stages:

1. Establishing scope and identifying key stakeholders. It is important to have clear boundaries about what your SROI analysis will cover, who will be involved in the process and how.
2. Mapping outcomes. Through engaging with your stakeholders you will develop an impact map, or theory of change, which shows the relationship between inputs, outputs and outcomes.
3. Evidencing outcomes and giving them a value. This stage involves finding data to show whether outcomes have happened and then valuing them.
4. Establishing impact. Having collected evidence on outcomes and monetised them, those aspects of change that would have happened anyway or are a result of other factors are eliminated from consideration.
5. Calculating the SROI. This stage involves adding up all the benefits, subtracting any negatives and comparing the result to the investment. This is also where the sensitivity of the results can be tested.
6. Reporting, using and embedding. This vital last step involves sharing findings with stakeholders and responding to them, embedding good outcomes processes and verification of the report.

[88] Source: A guide to Social Return on Investment (2012)

XI. USAID's Gender Dimensions Framework (GDF)

Whereas many gender frameworks are oriented specifically to understanding women's role as producers at the household level, the gender dimensions framework (GDF)[89] is built to identify gender issues at all levels of the value chain. The GDF was adapted from another analytical tool, the Six Domains for Gender Analysis that is used by USAID for its work in social sectors. The GDF looks at four key factors that shape gender within value chains:

- **Practices and participation.** Gender shapes several aspects of behavior that affect participation in value chains, including time allocation, mobility, labor decisions, membership of associations and involvement in other collective activities.
- **Access to assets.** Ownership, control and use of assets is influenced by gender relations. Important assets in an agricultural context include land, information and extension services, and education.
- **Beliefs and perceptions.** Beliefs mediate the behavior of both genders in areas including appropriate economic activities, employment opportunities and legal rights. In cases where gender neutral laws are in place, perceptions can influence how they are actually applied to each gender.
- **Laws, policies and institutions.** Varying legal rights impact the capacity of each gender to access support services (e.g., finance) or to establish horizontal linkages and therefore to participate in value chain opportunities.

Importantly, the GDF examines gender-based power issues across each of the above four areas. While an understanding of value chain governance and power is an important component of the value chain approach, it is particularly relevant for gender programming. Importantly, the framework moves the examination of power beyond the firm and worker level to also consider power relations within households and in the policies and norms of the enabling environment. The distribution of power between spouses, for instance, impacts household decision-making processes and thus plays an important role in shaping incentives for participation in value chains.

[89] https://www.microlinks.org/good-practice-center/value-chain-wiki/gender-dimensions-framework Accessed 12.13.15

XII. The Global Environmental Facility (GEF) Small Grants Program

There are practices established by the Global Environmental Facility's (GEF) small grants program that are particularly relevant and unique to the smaller project unit, these include for instance:

- A funding window that is less time-constrained. Most other projects have fixed time frames of 3 to 5 years. This causes projects to be "pushed" onto communities because the "deliverables" of the project must be achieved within the time frame. From field-based evidence of working with communities in Guyana, particularly hinterland communities, communities require time to understand, apply and implement projects. With time-constrained projects, they are led to cutting the planning process which then leads to projects that are unsustainable because time was not allowed for the communities to think it through.
- It recognizes grassroots groups and puts resources in their hands to execute their ideas. This empowers these groups to initiate changes in their communities rather than waiting on local authorities and governments.
- It focuses on building local capacity as an integral part of the project cycle. Many projects require communities to submit applications even when they lack the capacity to understand the project cycle and complete complex application forms. The Small Grants Program (SGP) offers Planning Grants to help applicants build their project planning and management capacity before they apply for project grants.
- It is flexible and dynamic. SGP recognizes the on-the-ground challenges and responds to make the process simple and efficient for proponents. One example is SGP accepting submissions in alternative formats after recognizing that some communities may not know how to write a proposal but can present it in their preferred way such as photo story or participatory video.
- It aligns itself with local priorities and national initiatives thereby making it relevant to local situations and local solutions.
- The SGP has also successfully directed funding to projects that maximize the impact of mitigation projects by educating and empowering women. It uses gender checklists and criteria on the National Steering Committee level as a means to mainstreaming gender through its projects. The GEF adopted its Policy on Gender Mainstreaming in 2012 – it addresses the links between gender equality and environmental sustainability and provides guidance on how the GEF will address gender mainstreaming in its policies, programs and operations.[90] Among other requirements, project monitoring incorporates both quantitative and qualitative data on the gender relevance of their work.[91] Also see GEF Policies on Environmental and Social Safeguard Standards and Gender Mainstreaming.[92]

[90] www.thegef.org/gef/policy/gender
[91] See The Guidance for Conducting Terminal Evaluations of UNDP-supported GEF-finance Projects http://web.undp.org/evaluation/documents/guidance/GEF/UNDP-GEF-TE-Guide.pdf
[92] http://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.10_GEF_Policies_on_Safeguards_and_Gender.April_26_2011.pdf

XIII. Measuring women's empowerment

	Baseline data	Programme inputs	
Economic Resources	capital, income, land, time, the market, health care, information	loans, lightening of workloads, technology, land, construction, means of transport	Indicators at the "assets" level must enable us to monitor increases in economic power: an increase in capital or income, better means of production such as land or technology, improved health care for women
Human Resources	management skills, technical know-how, ability to analyse, knowing how to read and write, self-confidence, self-perception	training, support, coaching, exchange visits	Indicators at the "will" level will serve to monitor women's increased ability to choose what path they wish to take in life together with an increase in self-confidence, self-perception or an ability to manage their fears. At individual level, it is also their ability to use their values to look to the future. At community level, it is a question of strengthening the feeling of belonging to the group in terms of commitment or respect for procedure in relation to a joint society project
Socio-Political Resources	being part of an organisation or solidarity mechanism, mobility, involvement in local politics, etc.	support for the organisation, structuring, networking, lobbying	Indicators at the "capacity" level will monitor women's increased ability to form groups and manage groups or services, as well as their ability to lobby and negotiate and to influence institutions The degree, to which women control or take part in the community, from simple presence to genuine involvement in decision-making, is a point to be considered.

Source: The women empowerment approach: A methodological guide[93]

[93] Research carried out by the "Gender and Indicators" working group of the Commission on Women and Development. Document coordinated and drafted by Sophie Charlier and Lisette Caubergs

XIV. W+ (formerly Women's Carbon Fund) Indicators

Domain	Outcome	Indicator
Income and Assets	Increased income in Households Increased ownership of assets Increased community funds under women's control.	- Increase in women's income generation - Control over use of household income by - Access to business management development initiatives - Increase in Assets (land, trees, equipment, livestock
Time	Improved well-being and increased productivity	- reduced drudgery - increased discretionary time. - Increased sharing of women's work by
Education and Knowledge	Increased knowledge and skills	- Increased access to literacy/numeracy and business skills - Increased access to new ideas - Increased access to extension services, including agriculture and health
Leadership	Increased decision making roles for women	- Increased representation in governance bodies - Increased numbers of women in executive positions of governance bodies - Increased quality of participation in community groups - women are actively supported /encouraged to participate and voice their opinions by
Food Security	Decreased food insecurity (goal to decrease under and malnutrition)	- Decrease in period of Food insecurity - Increase in yields - Increased access to seeds and seed diversity - Increased access to veterinary services -(veterinary services are open for longer hours to accommodate women and men
Health	Improved health	- Improved air, water quality - Improved sanitation and services - Access to Health education and Functional health posts

Source: Women Organizing for Change in Agriculture & Natural Resource Management (2013) Women's Carbon Standard (WCS) Annex I

XV. Root Capital and "hidden influencers"

http://info.rootcapital.org/applying-gender-lens-to-agriculture

Root Capital's shares experience of applying a gender lens to work in smallholder agricultural finance. Through their Women in Agriculture Initiative, they have been able to better understand the areas to support women (as farmers, agro-processing employees, and leaders**). This work has also identified new areas for potential impact that further foster economic empowerment for women, underscoring the vital nature of women in less conspicuous—but high-impact—roles and positions.**

In this issue brief, we explain:

- An entire tier of women employees we call "**hidden influencers**" who often go unnoticed but are critical to making businesses function properly
- How we evaluate gender-related outcomes within our portfolio using our **gender scorecard** to account for the range of roles, impacts and particular challenges of women
- **Financial products and training programs** that have a disproportionately high impact on women
- Our way of **approaching gender lens investing**, based on the nuances we see in the communities in which we work

Especially in cash crops like coffee, women are less likely than men to sign on as cooperative members or as registered suppliers to agribusinesses because of time constraints related to their roles of taking care of the home, child care, and elder care, lower mobility than men, and other cultural norms. While women's participation in agricultural activities varies widely by geography and other factors, their contributions are significant but economically undervalued.9 When women do become members or registered suppliers, their participation in leadership roles and enterprise-level decision-making is more limited than men.

Identifying Gender-Inclusive Value Chains

Another group of hidden influencers is lead farmers at Farmer Field Schools (FFSs). The FFS model uses a participatory training methodology in which farmers train each other on agronomic practices to improve productivity. While the schools can be a cost-effective way to share information and improve yields, women's participation is inconsistent and in many cases they do not participate because male decision makers do not select them to do so. Within the FFSs, lead farmers are elected to train other farmers, and women fill these roles with even less frequency than they do as trainees.

By systematically applying a gender lens to our portfolio of approximately 250 active clients, Root Capital has identified additional — albeit less celebrated — roles that women play that have disproportionately high impact on families and communities. These "hidden influencer" roles offer an opportunity to deepen our impact that we are only beginning to understand.