****Mainstreaming gender for sustainable soil management**

**Collection of contributions received**

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# Topic note

Soils are an essential and non-renewable natural resource that provide goods and services vital to ecosystems and human life. They are fundamental for producing crops, feed, fibre and fuel, for filtering water and cycling nutrients.

Unsustainable land uses, natural hazards and worsening climatic effects are increasingly degrading soil resources and placing the livelihoods of vulnerable populations in jeopardy. Already, 33% of world’s soils are degraded and more than 2.9 billion people are affected by land degradation leading to food shortages, hunger and malnutrition, conflicts over natural resources or distressed migration, with differentiated impacts on men and women.

As specified in the Voluntary Guidelines for Sustainable Soil Management (VGSSM), sustainable soil management is a measure to combat soil degradation processes, which simultaneously ensures the long-term productive potential of soils and the maintenance of their environmental functions. The successful use of the guidelines will depend on the collective action of multiple stakeholders in an inclusive, gender sensitive, and sustainable manner.

Closing the gender gap in access to productive resources and services is crucial for the achievement of a Zero Hunger world. Women comprise about 43 percent of the agricultural labour force globally and half or more in many African and Asian countries. They also constitute the majority of farmers in many of the regions most severely affected by desertification, land degradation and drought.

The labour burden of rural women exceeds that of men and includes a higher proportion of unpaid household responsibilities. Despite their crucial role in agriculture and food production, women often have limited rights to the land they farm, preventing them from efficiently controlling soil degradation and enhancing soil fertility.  Women also often cannot influence natural resource governance decisions and practices in their communities, and have less access to information, extension services and education than men.

This online discussion aims at collecting the views from a wide range of stakeholders about the relations between gender equality, sustainable soil management and food security. The feedback gathered from this consultation will inform and provide inputs to draft the ‘Guide on gender and sustainable soil management’, to be prepared by the Regional Soil Partnerships, the Intergovernmental Technical Panel on Soils (ITPS) together with the Social Policies and Rural Institutions Division of FAO, with inputs from gender and soil management specialists.

The objectives of this guide are to promote the adoption of a gender-responsive approach to support sustainable soil management. The target audience is composed of various stakeholders such as governmental institutions, non-governmental organizations engaged in gender, land and rural development issues, soil scientists/experts, land and soil professionals, women’s and farmers’ organizations, researchers and policy-makers.

To help with this inclusive process, we invite you to share your experience, views and feedback by replying to the following questions:

1. In your view, what is the relation between sustainable soil use, management and conservation (including soil fertility and health) and gender equality?
2. What are the distinct roles for women, men, boys and girls in sustainable soil management?
3. What are the main gender-based constraints, including unequal gender relations and discriminatory norms that hinder sustainable soil management and contribute to soil degradation? What practical solutions and approaches could help overcoming such barriers?
4. How can the promotion of gender equality and women’s empowerment contribute to sustainable soil management and conservation? Which interventions at policy and project/field level are of utmost priority? What are some potential entry points for success?

We greatly appreciate your contributions and ideas related to the topic of global importance ‘Sustainable Soil Management and Gender equality’.

Eduardo Mansur  
Director of Land and Water Division, FAO

Antonio Correa Do Prado  
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Facilitators  
Ilaria Sisto, Gender and development officer, FAO  
Ronald Vargas, Global Soil Partnership Secretariat, FAO

# Contributions received

## Mary Odusegun, St. Joseph Centenary Catholic College, Ilorin Kwara State, Nigeria

2. Women play so many vital roles in sustainability of the soil. They are the careful gender that are interested in farming.

3. It is inscribed in the DNA of every African man whether minor or adult to always put women aside and not allow their voice and suggestion to be heard. Those that ask for the female gender opinion have already make their decision. This is been extended sometimes whenever there is innovations in farming system, this men done times do not want these women who use the soil more to learn and implement such changes. Hence, ignorance continues and sustainability is not achieved

*Solutions*

Extension workers should focus more on women, search for them and encourage them

The male gender need to be given proper orientation on the value of women and gender equality

The female child should give both moral and formal education

## Lydia Wairegi, Kenya

1. *In your view, what is the relation between sustainable soil use, management and conservation (including soil fertility and health) and gender equality?*
2. *What are the distinct roles for women, men, boys and girls in sustainable soil management?*

The energetic group, for example the youth and men in their prime years can provide more (own) labour to agriculture than women. Boys and girls spend most of their time in school. But can help with less labour intensive farm activities when not in school.

1. *What are the main gender-based constraints, including unequal gender relations and discriminatory norms that hinder sustainable soil management and contribute to soil degradation? What practical solutions and approaches could help overcoming such barriers?*

Land ownership, the men tend to own the land, while not all youth and women own the land that they grow crops on. Ownership encourages investment in soil management practices that are capital intensive and have long term benefits. Without collateral (e.g. lack of title deeds), the youth and women have poor access to credit. Women are more disadvantages as they tend to be less educated than men. Men could be more likely to attend agricultural trainings than women.

The youth and men who aren’t elderly tend to invest in income generating agricultural activities compared to women and elderly men.

1. *How can the promotion of gender equality and women’s empowerment contribute to sustainable soil management and conservation? Which interventions at policy and project/field level are of utmost priority? What are some potential entry points for success?*

Interventions targeting land ownership, credit, input supply, and education (training) on good management practices should be a priority. For smallholders, interventions can be through community groups. For success, establishment of partnerships among different stakeholders (e.g. input suppliers, knowledge providers) along value chains necessary. What group to target is a dilemma; old farmers who have resources and can afford to invest in soil management practices may not be too keen to increase investments in agriculture, younger farmers who could be more interested in making changes cannot afford to invest more in agriculture, and females who own land may be elderly and poor. Empowering women and the youth needs for introduction of interventions to be through communities to get buy-in and support from all groups.

## [Murungi Jonan](http://www.fao.org/fsnforum/member/murungi-jonan), Agroecology advisor, Uganda

The Role of Ugandan Women in Rural Agriculture and Food Security

- Karen Ann McKenna University of Denver

Attachment:

<http://www.fao.org/fsnforum/sites/default/files/discussions/contributions/The%20Role%20of%20Ugandan%20Women%20in%20Rural%20Agriculture%20and%20Food%20Security.pdf>

## Ana Laura Jiménez, EARTH University/ Kalimajari Sustainable action and advocacy in Kakao (SUBAK) Project, Costa Rica

Original contribution in Spanish

1. *En su opinión, ¿cuál es la relación entre el uso, la gestión y la conservación sostenibles del suelo (incluidas la fertilidad y la salud del suelo) y la igualdad de género?*
2. *¿Cuáles son los distintos roles de las mujeres, los hombres, los niños y las niñas en la gestión sostenible de los suelos?*

Aunque el suelo es un recurso primordial para los humanos, muchas personas no tienen la educación ni el conocimiento para poder darle el uso adecuado, la conservación y los usos sostenibles que son necesarios para poder mantener la fertilidad y la nutrición que este necesita. Los suelos pertenecientes a plantaciones en áreas rurales las cuales son administradas por locales de las zonas son los que generalmente se encuentran más afectados ya que las personas tienen pocos recursos para poder comprar fertilizantes y otros recursos que ayuden a proporcionarle una reincorporación de nutrientes. También las áreas rurales son las más afectadas por el cambio climático ocasionando continuamente tiempos largos de sequía provocando una disminución de la productividad en las distintas plantaciones. Un mayor porcentaje de las tierras en estas zonas pertenecen al género masculino, siendo ellos quienes trabajan en el campo, hacen todo el trabajo desde la siembra hasta la cosecha del cultivo. Sin embargo, personas que han trabajado toda su vida en un solo cultivo, en un solo lugar y que siempre han tenido un ingreso después de la cosecha del cultivo, son difícilmente conmovidos por temas como la gestión y la conservación del suelo y no se dan cuenta de que pueden estar ocasionando daños irreversibles desde hace años. Por el otro lado las mujeres siempre han sido más sensibles a temas que sean importantes para sus familias y es ahí donde se debe hacer un enfoque para poder enseñarles técnicas que ayuden a mejorar la nutrición del suelo con la incorporación de nutrientes mediante adiciones de materia orgánica, tareas que sean de relevancia y que estén ligadas a actividades que hacen ellas día a día para mantener su casa. La igualdad de género no es empoderar más a las mujeres que a los hombres, es lograr hacer un balance para que las mujeres puedan ayudar a mejorar la productividad junto a los hombres, pero tomando en cuenta que ellas también pueden aportar ya que tienen un conocimiento de tema en este caso la importancia que tiene cuidar un recurso natural para hacerle ver a sus parejas el por qué deben de mantener prácticas sostenibles con el suelo.

1. *¿Cuáles son las principales limitaciones basadas en el género, incluidas las relaciones desiguales de género y las normas discriminatorias que obstaculizan la gestión sostenible de los suelos y contribuyen a su degradación? ¿Qué soluciones y enfoques prácticos podrían ayudar a superar esas barreras?*
2. *¿Cómo puede la promoción de la igualdad de género y el empoderamiento de las mujeres contribuir a la gestión y conservación sostenible de los suelos? ¿Qué intervenciones a nivel de políticas y de proyectos -o sobre el terreno- son de la máxima prioridad? ¿Cuáles son algunos puntos de partida potenciales para el éxito?*

Generalmente las limitaciones se basan en cultura y religión, por este y otros motivos como falta de educación las mujeres no se atreven a hablar o a expresar sus ideas, y si las expresan no se toman en cuenta porque las mujeres no son las que trabajan en el campo. Uno de los enfoques prácticos que se puede realizar son talleres enfocados en cada uno de los géneros y luego hacer un taller mixto en donde se puedan compartir ideas de ambos ya que normalmente estando mujeres con mujeres se pueden a llegar a sentir con una mayor libertad de opinión. ¿Por qué es importante que las mujeres se involucren más en labores del campo? Si se realizan talleres en donde se enseñen todos lo procesos desde la siembra hasta la cosecha del cultivo pero solo la parte práctica las mujeres no van a lograr dar opiniones propias que proporcionen un aporte, de lo contrario si se les enseña el por qué de cada cosa se les suministra una mayor motivación ya que cada una se pude especializar en el tema que más le guste por ejemplo, en Indonesia las mujeres se han querido involucrar más en el tema de fermentación del cacao ya que hay un mayor ingreso si se venden las semillas de cacao fermentadas y el gobierno ha querido apoyar más este tipo de prácticas proporcionándoles un mayor ingreso para poder mantener a sus familias. Si las mujeres estuvieran más involucradas en labores del campo y en talleres sobre el manejo sostenible de suelos en otras partes del mundo debidamente podrían saber cuales variedades de sus cultivos son mejores para sus suelos y por ende le darían un mejor uso con prácticas sostenibles. Vuelvo a recalcar que mantener una buena equidad de género no se basa en empoderar más a la mujer que al hombre es llevarlos a un nivel de conocimiento iguales donde puedan compartir sus ideas y proporcionar un mayor incremento en la productividad para que saquen el mayor provecho de sus cultivos y le puedan brindar la atención y la reincorporación necesaria de nutrientes que requiere un manejo consciente del suelo.

English translation

1. *In your view, what is the relation between sustainable soil use, management and conservation (including soil fertility and health) and gender equality?*
2. *What are the distinct roles for women, men, boys and girls in sustainable soil management?*

Although soils are an essential resource for humans, many people lack the necessary education and knowledge to use them and preserve them in an adequate and sustainable way, so as to maintain their fertility and required nutrition. Agricultural land -managed by locals- in rural areas is generally the most affected as people have limited resources to buy fertilizers and other agricultural inputs facilitating the reintroduction of nutrients. Rural areas are also the most affected by climate change, and therefore frequently subject to long droughts that reduce agricultural productivity. Most of the land in these areas is owned by men, who do all the work in the field, from sowing to crop harvesting. However, people who have cultivated a single crop on the same land all their lives and have always had an income after harvesting, are hardly moved by soil management and conservation, and are not aware of the irreversible damage they might have been causing for many years. On the other hand, women have always been more sensitive to issues that are important to their families. This should be used as an opportunity to teach them techniques -relevant to their everyday household activities- aimed at improving soil nutrition by incorporating nutrients through organic matter. Gender equality does not consist in empowering women more than men, but rather in striking a balance between the joint contribution of women and men to the improvement of agricultural productivity. The contribution of women -based on their knowledge of the importance of taking care of a natural resource and their ability to make their partners aware of the importance of sustainable soil management practices- should be taken into account.

1. *What are the main gender-based constraints, including unequal gender relations and discriminatory norms that hinder sustainable soil management and contribute to soil degradation? What practical solutions and approaches could help overcoming such barriers?*
2. *How can the promotion of gender equality and women’s empowerment contribute to sustainable soil management and conservation? Which interventions at policy and project/field level are of utmost priority? What are some potential entry points for success?*

Gender-based constraints are usually related to cultural, religious and educational aspects. Women are afraid of speaking or expressing their ideas. Even if they do so, their views will not be taken into account as they do not work in the field. One practical approach could consist in organising gender specific workshops -enhancing freedom of opinion, especially for women- followed by joint workshops in which both genders would share their ideas.

Why is it important for women to be more involved in field work? If workshops are only focused on teaching women all the agricultural processes -from sowing to harvesting- the outcome and resulting contributions will be limited. However, if the rationale of each process is properly explained, women will be more motivated as they can specialize in their preferred topic. For example, in Indonesia women wanted to be more involved in cocoa fermentation because fermented cocoa seeds generate higher revenue, and the government has supported this approach by providing women higher income to sustain their families. If women were more involved in field work and participated in workshops on sustainable soil management in other countries, they would know which crop varieties are better suited for their soils and would therefore improve their use adopting sustainable practices. Let me stress once more that gender equality does not consist only in empowering women more than men: it consists in bringing them to an equal level of knowledge where they can share their ideas and increase agricultural productivity as a result, making the most of their crops and providing the care and nutrients required by soils.

## Abdesslam Omerani, Haut Commissariat aux Eaux et Forêts et à la Lutte Contre La Désertification, Morocco

Original contribution in French

Point 2 :

Dans les communautés rurales de l’Afrique du Nord, et pour des considérations culturelles, les travaux aux champs loin des foyers sont généralement assurés par les hommes (labour, moisson,…..). Les femmes jouent un rôle prépondérant dans les activités d’élevages (petit  et grand élevages) effectués au foyer ou dans les proximités immédiates du village. Il arrive également qu’elles participent aux travaux de récolte de fruits loin des foyers mais quand ils sont réalisés en groupe.

Souvent, les femmes se trouvent contraintes de la besogne d’approvisionnement en bois de feu ( en petits groupes) qui exige le parcours de distances de plus en plus longues, d’où l’intérêt de leur implication dans l’établissement et la gestion de bosquets familiaux et villageois

La promotion et l’autonomisation des femmes devraient donc à mon sens, se focaliser sur ce type d’activités dans le cadre de plans d’aménagement et de gestion durable des terroirs impliquant tous les acteurs.

English translation

Item 2 :

In rural communities in North Africa, and for cultural reasons, men are generally responsible for working in the fields far from home (ploughing, harvesting, etc.). Women play a predominant role in livestock activities (small and large livestock) carried out at home or close to the village. They also sometimes participate in the harvesting of fruits away from homes, but only when it is carried out in groups.

Women are often obliged to supply firewood (in small groups), which requires them to travel ever longer distances, hence the importance of their involvement in the development and management of family and village groves.

In my opinion, the promotion and empowerment of women should therefore focus on this type of activity as part of plans aimed at the sustainable development and management of terroirs, involving all stakeholders.

## Marcela Ballara, Red de EducacionPopular entre Mujeres REPEM LAC, Chile

Original contribution in Spanish

Promover el empoderamiento de las mujeres rurales, indígenas y afrodescendientes en la gestión y conservación sostenible de suelos implica que los indicadores críticos para garantizar sus derechos y seguridad a la tenencia a la tierra los países deben comprometerse a aplicar los ODS en su totalidad y en especial el Indicador 1.4.2. en derechos seguros de la tierra; objetivo 5.a. sobre los derechos sobre las tierras agrícolas, y el indicador 5.a.2 sobre los marcos legales, incluido el derecho consuetudinario, que garantiza la igualdad de derechos de las mujeres rurales, indígenas y afrodescendientes a la tierra y a su control

Los datos que se levantes para el seguimiento y monitoreo de los indicadores arriba mencionados además de disgregarlos por sexo estos deben ser accesibles, oportunos, confiables y en lo posible estar desglosados por ingresos, sexo, edad, raza, etnia, situación migratoria, discapacidad y ubicación geográfica y otras características pertinentes en los contextos nacionales

Los análisis intersecionales deben estar incluidos pues son herramientas para la justicia de género y la justicia económica Hay que considerar que las mujeres rurales ( y las urbanas tb) no son homogéneas y el análisis de la interseccionalidad ayuda a revelar las varias identidades, discriminación y desventajas como consecuencia de la combinación de identidades. Importante cuando se proponen planes de acción ya que hay diferencias entre países y en los mismos países.

Sobre la pregunta Qué intervenciones a nivel de políticas y de proyectos -o sobre el terreno- son de la máxima prioridad?

Hay que hacer un fuerte trabajo de inserción en las políticas publicas del sector agropecuario, por ejemplo, y buscando indicadores medibles por países. . También hay que ser coordinar con otras agencias que trabajan temas mas específicos como por ejemplo ONUMUJER, UNESCO . Hay que trabajar también en las cadenas productivas e integrarles de manera efectiva y con discriminación positiva.

El desarrollo de una política publica de género en el sector rural es básico para poder integrar las necesidades de las mujeres rurales en los proyectos y actividades que realizan los Ministerios de Agricultura, Pesca . Uno de las barreras que las mujeres rurales han enfrentado a nivel de las políticas es la inexistencia de la Unidades de las Mujeres Rurales en los Ministerios respectivos . Esto ha sido entre otros un retroceso para poder influir directa y efectivamente en la implementación de actividades y acciones que mejoren relaciones desiguales de género y las normas discriminatorias que obstaculizan la gestión sostenible de los suelos..

Un ejemplo de cuáles se podrían considerar un punto de partida potenciales para el éxito de los proyectos?

En Chile FAO ha tenido experiencias en el pasado apoyando la creación de políticas publicas en el sector agrario y dirigido a las mujeres rurales y ha apoyado durante muchos años la Mesas de la Mujer Rural. Estas fueron instancias de diálogo gobierno y organizaciones de mujeres de la sociedad civil a nivel nacional y regional. Promover, este enfoque en otros países contribuiría por un lado a que las mujeres rurales hagan intervenciones para la igualdad de genero a nivel de políticas y de proyectos como también en el sobre el terreno influir en las normas discriminatorias de las mujeres rurales que obstaculizan la gestión sostenible de los suelos.

Para la implementación de proyectos hay que incluir la participación de la sociedad civil en especial de los grupos de mujeres que trabajan en el sector rural.

Marcela Ballara

English translation

Promoting the empowerment of rural, indigenous and Afro-descendant women in sustainable soil management and conservation implies a commitment by the countries to monitor progress towards the achievement of the SDGs using critical indicators. Especially those related to guaranteeing their rights and land tenure security: Indicator 1.4.2 on securing tenure rights to land; Target 5.a regarding agricultural land rights; and Indicator 5.a.2 on legal frameworks (including customary law) guaranteeing women’s equal rights of rural, indigenous and Afro-descendent women to land ownership and/or control.

The data collected to track and monitor progress using the above-mentioned indicators should be accessible, timely, reliable and -wherever possible- disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographical location and other relevant characteristics to national contexts.

Intersectional analyses should be included as they are useful tools to address gender and economic justice. Rural and urban women are not homogeneous groups and assessing intersectionality helps to reveal different identities, discriminations and disadvantages resulting from the mix of personalities. This is particularly important when action plans are proposed, as differences exist between and within countries.

Which interventions at policy and project/field level are of utmost priority?

Intense efforts must be made to incorporate these topics into public policies supporting the agricultural sector. Measurable national indicators should be sought. Coordination with other agencies working on more specific issues -such as UN Women and UNESCO- is also necessary. Effectively integrating women in production chains and applying a policy of positive discrimination is also desirable.

Developing a public gender policy in the rural sector is essential to integrate the needs of rural women into the projects and activities undertaken by agriculture and fisheries ministries. One of the barriers faced by rural women at the policy level is the lack of dedicated units in the corresponding ministries. Among other aspects this has been a setback for their direct and effective influence in the implementation of activities and actions targeting unequal gender relations and discriminatory rules hindering sustainable soil management.

What are some potential entry points for success?

In Chile, FAO has for many years supported public policymaking in the agricultural sector aimed at rural women and the Working Group on Rural Women (Mesa de Trabajo Mujer Rural) -a dialogue, participation and coordination forum between the government and women organizations at the national and regional levels. Promoting this approach in other countries would help rural women to implement gender-equality interventions at the policy and project levels and influence discriminatory rules hindering sustainable soil management on the ground.

The participation of civil society -especially groups of women working in the rural sector- is deemed necessary to implement the projects.

## Oumou Kelthoum Niang, FAO, Mauritania

Original contribution in French

1. La relation entre l’utilisation durable des sols, la gestion et la conservation d’une part et l’égalité des sexes d’autre est une relation forte et multidimensionnelle : économiques, sociale, culturelle et politique

2. Les rôles sont plus ou moins différents :

Les femmes et les jeunes se charge directement de l’exploitation de la ressource et de la production pour des besoins de sécurité alimentaire et de la nutrition.

Les hommes se chargent, en grande partie, de la gouvernance de la ressource. Les travaux endurant sont laissés en grande partie aux femmes et jeunes.

3.les principales contraintes liées au genre (femmes, jeunes, et autres groupes à statut foncier précaires…) sont :

- les difficultés d’accéder de manière durable à la ressource (titre foncier…)

- l’exclusion du processus de prise de décision lié à la gouvernance des ressources (terres, forêts, pêches, zones agro-pastorales…) ;

- l’absence d’espace inclusif et participatif qui permet aux femmes et aux jeunes de prendre la parole et exprimer leurs attentes ;

- l’absence de disposition juridiques claires garantissant et/ou préservant les droits des femmes et des jeunes à accéder à la ressource naturelle ;

- le blocage des forces traditionnelle au niveau des villages contre toutes initiative de démocratisation des débats qui permettront aux femmes et aux jeunes de prendre la parole au même titre que les hommes, détenteur du plein pouvoir.

- inadaptation des financements agricoles aux besoins et attentes des femmes et des jeunes.

4.Mettre en place des plateforme multi -acteurs inclusives et participatives est une solution qui permettra :

- d’engager, au niveau local, un dialogue apaisé entre tous les acteurs pour trouver des solutions consensuelles qui prennent en compte les intérêts des uns et des autres ;

- cultiver la culture du dialogue inclusif et participatif entre tous les acteurs de la sécurité alimentaires : Les administrations, les ONGs, les représentants des jeunes et des femmes, les organisations socio- professionnelles, les acteurs privés, les agropasteurs, les pêcheurs, les éleveurs, les responsables de la gestion des forêts, les élus locaux…….

- d’instaurer un climat de confiance entre tous les acteurs dans la mesure où tous les efforts sont orientés sur la recherche d’une sécurité alimentaire durable.

5. La promotion de l’égalité des sexes vise, sans exclure les autres groupes, la prise en compte de ce segment de la société qui :

- constitue la force de travail active au niveau des terroirs ;

- travaille pour le panier alimentaire de la famille ;

- réside régulièrement dans le village (dans certains contextes les hommes voyages souvent beaucoup contrairement aux femmes)

- consolide et développe l’’autonomisation des femmes la mesure où elles sentiront qu’elles ne sont plus exclues et que leurs différents rôles sont reconnus de tous avec les appuis (techniques, financiers, juridiques…) nécessaires.

6. Sans être exhaustif, les appuis politiques et au niveau des projets qui sont prioritaires se résumes aux points suivants :

- instaurer un dialogue inclusif à la base pour alimenter, en termes d’idées porteuses, le niveau politique - En termes d’idées, pour faire remonter des idées innovantes qui mieux éclairer les décideurs politiques et ceux en charge de la gestion des ressources naturelles. C’est le rôle des projets.

English translation

1. There is a strong and multidimensional relationship between sustainable land use, management and conservation on the one hand and gender equity on the other, at the economic, social, cultural and political levels.

2. Roles are relatively different :

Women and youth are directly involved in the exploitation of the resource and production to meet food security and nutrition needs.

Men are largely responsible for the governance of the resource. Hard work is left largely to women and young people.

3.The main gender-related constraints (women, youth, and other groups with precarious land status...) are as follows:

- - difficulties in accessing the resource sustainably (land title...)

- exclusion from the decision-making process related to resource governance (land, forests, fisheries, agro-pastoral areas, etc.);

- lack of an inclusive and participatory space for women and youth to speak out and express their expectations ;

- absence of clear legal provisions guaranteeing and/or preserving the rights of women and young people to access natural resources ;

- obstruction by traditional forces at the village level to any initiative to democratize debates that will allow women and young people to speak out as equals to men, who hold full power ;

- inadequacy of agricultural financing to the needs and expectations of women and young people.

4. The development of inclusive and participatory multi-stakeholder platforms is a solution that will allow :

- to engage, at the local level, in a peaceful dialogue between all stakeholders to find mutually agreed solutions taking into account each other's interests ;

- to foster a culture of inclusive and participatory dialogue between all stakeholders in food security : public administrations, NGOs, youth and women's representatives, socio-professional organizations, private actors, agropastoralists, fishermen, pastoralists, forest managers, local elected officials.........

- to build trust between all actors by focusing all efforts on achieving sustainable food security.

5. Without excluding other groups, promoting gender equality aims at taking into account this segment of society which :

- constitutes the active labour force on the field level ;

- works to supply the family's food basket ;

- resides regularly in the village (in some contexts men often travel a lot unlike women) ;

- strengthens and develops women's empowerment as they will feel that they are no longer excluded and that their different roles are recognized by all with the necessary support (technical, financial, legal...).

6. While not exhaustive, the priorities for political and project support can be summarized as follows :

- to establish an inclusive dialogue at the grassroots level to inform the political level with promising ideas ;

- In terms of ideas, to stimulate the feedback of innovative ideas that better inform policy makers and those in charge of natural resource management. That is the role of projects

## Saud Al Farsi, FAO, Oman

In my opinion, before we start any action or comments or discussion for the gender equality in relation with sustainable soil management (SSM), we have to consider the following issues:

1. Countries development / countries GDP.
2. Level & type of agriculture education in the countries in relation to SSM.
3. Percentage and ages of both gender in the countries.
4. Courtiers policies on rural and agricultural lands.
5. Unemployment percentage in the countries.
6. Country security and safety.

What is the relation between sustainable soil use, management and conservation and gender equality?

Because sustainable soil management (SSM) is related to soil and agricultural extension graduate. So, to get or to find and justified this relation we have to specify and evaluate the education type and level in the countries.

What are the distinct roles for women, men, boys and girls in sustainable soil management?

* Women: can play a great role in agriculture extension by convincing each other in any issue related to SSM.
* Men: can play implement and demonstrate the issue related to SSM.
* Boy & girls: can play a role during any rural activities related to SSM.

What are the main gender-based constraints?

1. Most of soil and water specialist are Men (Education level and class).
2. Most women are not accepting the farming work because it’s very hard.
3. Some of societies will not accept the ladies to work in the farms.
4. The low income from agricultural project specially in poor countries.

What practical solutions and approaches could help overcoming such barriers?

1. Education, education level, Technical & Training Centers for both gender.
2. Small & Medium enterprises (SMES) cooperate gender projects.
3. Reducing land fragmentation.
4. Strengthen the agricultural association specially the gender based.
5. Governmental / united nation subsidies for joined gender based project.
6. Facilitate and insuring the product marketing.

How can the promotion of gender equality and women’s empowerment contribute to sustainable soil management and conservation?

1. Reduction in unemployment percentage (country level) especially in agriculture sector.
2. Increase and enhance the preservation & protection of the natural / land resources.
3. Facilitate the implementation the SSM programs (short, mid, and long term).

Which interventions at policy and project/field level are of utmost priority?

1. Reduce the land fragmentation in order to attract both gender together to invest in agriculture sector and to sustain the land use.
2. Create / build up / enhance an agricultural society including both genders.
3. Enhance the women in agriculture field by subsidies.
4. Educate, enhance, and train both gender on how to build up business from agriculture field.
5. Reduce the tax for the agriculture product’s spatially for the local market and if the products produced from union gender company.
6. Women has a right to own agricultural property.

## Heleen Claringbould, CorePage, Netherlands

1) In your view, what is the relation between sustainable soil use, management and conservation (including soil fertility and health) and gender equality?

The relation between sustainable soil use, soil management and soil conservation (including soil fertility and soil health) and gender equality is that more men are involved, when sustainable soil management practices (and agricultural management practices) are being introduced (in project workshops or demonstration meetings for European farmers[[1]](http://www.fao.org/fsnforum/activities/discussions/soil-gender#_ftn1)). Despite of trying to involve women as well as men, the fact is that women farmers are a minority in Europe, therefore they are also often a minority in project study site communities, which may make them, being a minority, less convenient to participate, but in missing these introductions, also their views, ideas and perspectives will not always be represented adequately and the women are less informed and less involved than men. The invited women however, seem to be interested in the sustainable management subject, as it was shown in the (SoilCare EU) project, although lower in number, in percentage the participation level of women was higher than compared to the percentage of invited men.[[2]](http://www.fao.org/fsnforum/activities/discussions/soil-gender#_ftn2)

2) What are the distinct roles for women, men, boys and girls in sustainable soil management?

In sustainable soil management the roles for women in the European case studies are -more or less- the same as for men, except that more men than women are into farming and forestry. Related to the non-sustainable soil management stakeholders, women are involved and especially interested in sustainable soil (and land) management, considering aspects as the health of the soil and the crops that are being produced now and in the future. In the EU project RECARE[[3]](http://www.fao.org/fsnforum/activities/discussions/soil-gender#_ftn3), a lot of interviews with stakeholders on the subject were held, and some interesting results were, that the women stakeholders tended to respect the soil for its possibilities, where the men tended to look how well the exploitation possibilities of the soil were; Women reminded us about the health of future generations with sustainable soil management, where men specifically mentioned terminology like efficiency related to crop production. These remarks are not significant in numbers, but several women from the case study sites were pointing more to the future health of the soil and considering the threats of their soils, where several men were more focussed on the economic possibilities and the way they could use the soil. There are of course also men with the conservation perspective and women with the production perspective, showing that these approaches are not necessarily gender based, but more gender related, because the men (and women) influence each other in their approach.

3) What are the main gender-based constraints, including unequal gender relations and discriminatory norms that hinder sustainable soil management and contribute to soil degradation?

A gender based constraint in soil management is juridical and/or cultural, when there are laws that discriminate on gender with regard to access to land ownership or inheritance or rules that discriminate on access to (agrarian) schools, jobs, loans, funds, buildings, or on salaries. Often the European laws and public rules are not (any more) discriminating on gender, but the practice still is, as often mentioned the “normal” situation, such as women have to do the household without payment, or women are thought not able or willing to run a farm. It contributes to soil degradation in the way that soil management misses the gender balance or better: the gender diversity, for a sustainable land management approach, but is a male dominated (more focus on the land use and its profits, despite of the soil threats), where a more future based, female minded approach (for healthy soils, its conservation and the importance of soil biodiversity, and preventing soil threats) could bring a better balance.

What practical solutions and approaches could help overcoming such barriers?

To have a balance of women and men in sustainable soil management, women should be more attracted to this field and some gender related issues should become societal issues solved by juridical, institutional and practical flexible appointments (or rules). Which also shows that gender inequality is a bigger problem, but about sustainable soil, one can for example build a generous (digital) floor to exchange knowledge from the different gendered perspectives (economic growth and quality -biological, chemical and physical healthy soils-). And support for more women to become empowered for positions in sustainable farm management.

To maintain soil quality and soil biodiversity, and for reasons of human health and reproductivity, we should focus on more sustainable, biological solutions, solutions that could make the organic farming increase, instead of producing chemical fertilizers, insecticides and plastics, for temporary higher yields, losing soil quality in the meantime. For soil quality and human health, more strict norms are needed for amounts, type, and mixtures of chemicals for yield improvement, as well as for example, frequency of use.

4) How can the promotion of gender equality and women’s empowerment contribute to sustainable soil management and conservation? Which interventions at policy and project/field level are of utmost priority? What are some potential entry points for success?

Sustainable soil management and conservation courses on the internet, and through soil information exchange mobile phone applications[[4]](http://www.fao.org/fsnforum/activities/discussions/soil-gender#_ftn4) for everyone, where the future is designed with subjects that may attract women as well as men, (biodiversity in agriculture, natural fertilizer, combinations with new energy), both men and women are needed to make sustainable- or “organic” farming bigger. To gather more women in soil management and conservation, they should be attracted with issues of their interest, supplied with funds that help them to work on their ideas and offered support from women advisors that might be sensitive to their questions. Not to separate the world, but to make it more equal, since women are a minority in soil and agricultural management, they could use extra incentives, for example: Require involvement of women from applicants when distributing extra loans or subsidies to start a sustainable soil management or conservation practice, or an organic farm.

[[1]](http://www.fao.org/fsnforum/activities/discussions/soil-gender#_ftnref1) i.e. <https://esdac.jrc.ec.europa.eu/public_path/u890/Other/CASCADE_Newsletter4.pdf>

[[2]](http://www.fao.org/fsnforum/activities/discussions/soil-gender#_ftnref2) <https://www.soilcare-project.eu/downloads/soilcare-reports-and-deliverables/99-report-08-soilcare-p1-gender-equality-report-heleen-claringbould-full/file>

[[3]](http://www.fao.org/fsnforum/activities/discussions/soil-gender#_ftnref3) <https://www.recare-project.eu/downloads-by-category/public-documents/recare-reports/gender-equality-reports/430-report-50-gender-equality-report-p4-heleen-claringbould-full/file> (p.16)

[[4]](http://www.fao.org/fsnforum/activities/discussions/soil-gender#_ftnref4) For example SQAPP, for soil quality assessment and monitoring, see: <http://www.isqaper-is.eu/new-standards>

## [Aklilu Nigussie](http://www.fao.org/fsnforum/member/aklilu-nigussie)****,**** Ethiopian Institutes of Agricultural Research, Ethiopia

For the question of "In your view, what is the relation between sustainable soil use, management and conservation (including soil fertility and health) and gender equality?"

In Ethiopia sustainable soil use, management and conservation are a very important dialogue point because our livelihood is more related to the land (agriculture-crop production as food and as cash, -livestock production in pastoral or high landers, export is based on cash crop that generates the GDP highest share etc).

So; from gender perspective or mainstreaming gender issue is highly advocated to create responsive access or control to its betterment to present or future change of livelihood. My perspective is that all gender dimensions (female, male and youth) are responsible for diversified responsibility with the different workloads to conserve it; yet all are equally or with equality responsible since it will affect their life directly or indirectly with the tenure system or land-based institutional system.

The equality arises in responsiveness to conservation and management for its sustainability; yet at micro-level there will appear share of responsibility visa vis workload at household level.

## Chiara Franco, Nature Conservancy Micronesia Program, Federated States of Micronesia

*In your view what is the relation between sustainable soil use, management and conservation (including soil fertility and health) and gender equity?*

In Micronesia management of soil and enhancement of soil fertility is key for food security of high volcanic and low coral islands. For instance, on low-lying islands, abandoned fields are more prone to water infiltration and soil ‘build-up’ through mulching and composting is the process that help reduce this threat. In some islands, taro patches are owned and managed by women.  Taro patches play an important cultural and social role, and in many islands, women are the guardians of these resources by working the patches to ensure appropriate drainage and soil quality. In other islands, where agroforestry is culturally executed by men, women play an important role in managing home gardens that provide vegetables to the household or local markets. Many times, these gardens require women to practices with active soil management by adding compost or seaweeds to maintain or re-establish soil nutrients.

*What are the distinct roles for women, men, boys and girls in sustainable soil management?*

For the Pacific region this is highly variable and dependent on the country, state or atoll and island. In cases were women are the custodian of taro patches, they also have a direct impact sediments runoff, since the taro patches system naturally traps sediments.

*What are the main gender-based constraints, including unequal gender relations and discriminatory norms that hinder sustainable soil management and contribute to soil degradation? What practical solutions and approaches could help overcoming such barriers?*

In some cases, the low participation in the decision-making process can impair the ability of women and youths to access trainings and information on appropriate methods for soil management. In other cases, access is limited because the time slots allocated to training and workshops are in conflict with women commitments to family and salaried jobs. Creation of active platforms for knowledge exchange and management, as well as replication of trainings and workshop at suitable times, can help improve women access to information and equally build their capacity in sustainable soil management.

*How can the promotion of gender equality and women’s empowerment contribute to sustainable soil management and conservation? Which interventions at policy and project/field level are of utmost priority? What are some potential entry points for success?*

Although women and youth are directly contributing to production of crops, playing a key role for households’ adaptation, they are generally not directly involved in land management decisions, which commonly involve adult men of the family or clan. However, increasing recognition of the importance of soil management for households’ gardens and agroforestry is leading to a greater engagement of women groups and youths in trainings for food security that includes aspects of soil and crop management. In the region, women groups and women led NGOs are active in implementing projects or providing training to women, men and youths for best practices for reducing soil erosion and sustainable soil management. In the north west Pacific, projects focusing on utilization of ecosystem-based adaptation practices (e.g. restoration of traditional taro patches, buffer strips, contour bunds, rain gardens, etc.) and production of compost for soil amendment, are targeting both women and men to increase food security. There are several examples from the Republic of Marshall Islands, the Federated States of Micronesia and the Republic of Palau where women are leading transformational changes for long-term adaptation, specifically targeting soil erosion and quality for food and water security. For instance, in the Federated States of Micronesia, promotion of portable and normal dry litter piggeries, supported by farmers associations and women associations and groups, is allowing production of local compost from pig waste. This method reduces the threat of animal waste to water ways and human health, while enhancing soil quality. Women groups and NGOs are also implementing soil erosion control techniques, such as planting contour strips along slopes and restoring abandoned taro patches, which are natural sinks for sediments.

Due to the serious threat of climate change to food security, schools are inserting “learning gardens” in their curricula, while colleges are engaging and training young men and women on innovative agriculture techniques.

## Dick Tinsley, Colorado State University, United States of America

With all the money invested in gender based projects mostly for women "impowerment" I have an underlying concern that should be addressed at the beginning. The entire women "impowerment" effort has an underlying current that all or at least most women are in an adversary  relationship with thier husbands. I find this hard to beleive as adversary relationships are very unpleasant to say the least and most people try to avoid them. Thus, I would be interested to know what percent of women are in an adverary relationship and in need of impowerment vs. what percent are in a colloborative relationship with their spouces and not in need of impowerment?   Also, since women are heavily involved with domestic chores, child care, meal preparation, etc. how much time and more imporant dietary energy does this consume, vs. how much time and energy do thay typically have to participate in economic activity? I think with the limited calories available to the family women would consume most of thier available calories with the domestic chores with very little time and effort available to engage in economic opportunities, either assisting the family in farming or some indepoendent economic activity. In addition if they become involved will this become a source of added antagism between spouces? Finally, if women become involved in independent economic activities, instead of assisting with the primary economic activity of the family, what will the impact be on total family well being? Would the family be better off concentrating on the primay economic effort even if lead by the husband? Shouldn't answering these questions be the precursor to an major effort at women "impowerment".

Please review the dietary energy webpages to see how limited available calories will impact on womens ability to become involed in economic activities in addition to thier domestic responsibilities.

https://smallholderagriculture.agsci.colostate.edu/calorie-energy-balance-risk-averse-or-hunger-exhasution/

https://smallholderagriculture.agsci.colostate.edu/ethiopia-diet-analysis/

<https://smallholderagriculture.agsci.colostate.edu/affordability-of-improved-nutrition-while-optimizing-economic-opportunities/>

## Andrew Patterson, CARE, United States of America

Gender equality and women’s empowerment are essential to contribute to sustainable soil management and conservation because they address underlying resource and knowledge inequities between women and men that affect soil management, land tenure, and a host of other related topics. CARE’s [She Feeds the World](https://www.care.org/sites/default/files/documents/she_feeds_the_world_final_-_061318.pdf) programmatic framework has six identified interrelated areas of change to focus priority interventions: supporting women’s empowerment; increasing women’s access to and control of productive resources; enabling women’s access to inclusive markets; improving nutrition; promoting social protection; and, multiplying impact to enable change at scale.

Priority activities for women’s empowerment are building agency, changing relations, and transforming structures and these underpin systemic gaps in resources and capacities to sustainably manage soil. Beyond these activities, those that address access to, and control of productive resources are imperative because the ability to access and control productive assets and resources is vital for women and youth producers. It impacts their ability to engage in sustainable agriculture and markets, manage short term environmental shocks, and effectively cope with climate shifts. Women’s control over assets are also related to decision-making at home and in the rural economy, which affects their children’s wellbeing. [She Feeds the World](https://www.care.org/sites/default/files/documents/she_feeds_the_world_final_-_061318.pdf) improves access to information, appropriate agricultural and productive resources, and assets, prioritizing land water, inputs, technology and information (including clean energy), and finance.

Land access, in general, is a priority topic because most land inheritance systems ensure that land is owned and controlled by men ([FAO, 2011](http://www.fao.org/publications/sofa/2010-11/en/)). As a result, women lack the opportunity to access land for production. Where land is communally owned, traditional leaders prioritize access for men because they do not value women as producers. In places where have families have land titles, men are dramatically more likely to be the sole title holders and as such women are unable to use the land as collateral to access loans for investment in production. Access to land is increasingly under threat as speculators and commercial producers spread their demand for land and water resources to new areas, while community natural resource management structures are mainly male-dominated, constraining women’s rights to natural resources and the ecosystem services they provide. The productive capacity of land that women can access is increasingly constrained due to soil-loos, over-production and desertification: a fifth of cropland has been so degraded it is no loner suitable for farming (Interaction, 2011). SFTW addresses this injustice through a multi-pronged process that includes gender and community [dialogues on access to land](https://www.care.org/work/world-hunger/agriculture/projects/pathways), advocacy to influence policy on access and utilization of land for women, innovative approaches to titling and enabling women’s access and control of land, climate resilient agriculture approaches to promote increased soil quality and water retention and to regenerate degraded land, and [landscape approaches](https://reliefweb.int/sites/reliefweb.int/files/resources/CARE_WI-A-Landscape-Approach-for-DRR-in-7-Steps-1.pdf) for natural resource management and risk reduction.

## Sahar Babiker Ahmed Abdalla, Agricultural Research Corporation (ARC), Sudan

**1. In your view, what is the relation between sustainable soil use, management and conservation (including soil fertility and health) and gender equality?**

Unequal access to land, market and agriculture services to the different community members how has benefit from the farms it will directly effects their farm managements. Women in Sudan especially in the west of the country do most of the work in Agriculture; however, they don’t own the land. They cultivate small farm efficiently near the village or in the house. Providing access to land to women will aid them to accept new conservation package

**2. What are the distinct roles for women, men, boys and girls in sustainable soil management?**

Their roles will be defined according to their contribution in the livelihood income for the household. They complete each other’s women are look after the family doing cooking, cleaning, raising kids and as labor on the farm. Women could contribute in soil sustainability if they trained to increase the added value form the family waste. The residue from the food can be used as organic amendments to the soil if they now how compost it. Men, their role is to cultivate the land and sale the product and all the decisions relating to the farm managements are taken by them. Boys and girls go to school or stay to participate on the household income by different means according to the family financial status. Boys and girls can contribute and help the family in their spare time by engaging in small income work activity especially if they were closed to the city.  Extra income beside the farm income will decrease the over use of the land and help to be sustained.

**3. What are the main gender-based constraints, including unequal gender relations and discriminatory norms that hinder sustainable soil management and contribute to soil degradation? What practical solutions and approaches could help overcoming such barriers?**

The main constraints according to my experience are culture and the land production relationship. Where, at the western part of Sudan all the hard work on the farm, are taken by women while men are sale the product and take all the decision regarding the farm activities. At the northern and middle part the situation is completely different, women are not allowed to participate on farm activity is considered as men job. At Gezira scheme in Sudan farmers settlement is one of constrain where, some women refused to move to the farms where their husband and prefer to stay at the village. Due to these situation farmers will not be able to follow up their farms perfectly and some time they abounded it. Regarding the land production relationship, women are cultivating the farm but she has no rights all complete authority to sale the product husband will do that and even take all the decisions related to the farm activities. Men will receive all the services as the owner of the land but this will not grantee that he will use it at his farm.

The practical solutions and approaches which could help to overcome such barriers in my view are:

1. Increase the women awareness by their rights and help them to have their own income.
2. Help women to have their own groups such as societies to find means for product sales
3. Training workshop for the farmers in waste management it will help them to get an added value from their waste especially food waste.
4. Provide agricultural service to how cultivated the land; in case of the women who cultivated the land insure that she receive such services.
5. Increase the extension services and pay more attention to the small farmer. By providing appropriate agricultural package.
6. Encourage land owner to invest his land in sustainable manner
7. Create other source of incomes for women other than agriculture such as crafting and traditional foods making.

**5. How can the promotion of gender equality and women’s empowerment contribute to sustainable soil management and conservation? Which interventions at policy and project/field level are of utmost priority? What are some potential entry points for success?**

The most important parameter is improving land tenure system to allow women own the land.

Although women do most of the activity in agriculture in the Western part of Sudan, marketing of the product is man Job. Therefore allow women to market her product will give her economical stability

Women need to have access to bank to get loan (without economical independence she can’t get fund from banks. (She has nothing as guarantee)

## Comfort Eze, Nigeria Institute of Soil Science, Nigeria

**MAINSTREAMING GENDER FOR SUSTAINABLE SOIL MANAGEMENT.**

**WHAT IS THE RELATION BETWEEN SUSTAINABLE SOIL USE, MANAGEMENT AND CONSERVATION AND GENDER EQUALITY**

Sustainable use of soil is the use, management and conservation of soil to meet the changing human needs of the present generation while at the same time ensuring that the soil can also meet the needs of the future generation. To achieve this, men, women, boy and girl have to be involved actively. For the soil use to be sustainable, soil has to be managed properly and its inherent qualities has to be conserved.

**WHAT ARE THE DISTINCT ROLES FOR WOMEN, MEN, BOYS, AND GIRLS IN SUSTAINABLE SOIL MANAGEMENT**

In the rural areas, women, men and boys play a prominent roles in farming activities from land clearing, tillage operations and other agronomic practices including fertilizer application while the girls are engage in domestic chores.

**WHAT ARE THE MAIN GENDER-BASED CONSTRAINTS?**

The main gender-based constraints in sustainable soil management is the significant gender-based gap and inequalities in land ownership, secondly putting women behind in important discussions settings from the local to the global world, about the nature of the problems and possible solutions or coping strategies.

**WHAT PRACTICAL SOLUTIONS AND APPROACHES COULD HELP OVERCOMING SUCH BARRIERS?**

Women play vital roles in agricultural systems, thus they have good knowledge about plants and agricultural techniques that might help adaptation strategies. If women aren’t at the “table” when coping strategies and adaptation approaches are discussed, this knowledge won’t be represented. And the solutions include:

* To empower women and to broaden their exposure in sustainable soil management, conservation and food security.
* Programs should strengthen, educate to build on the women’s knowledge and help create more awareness relating to soil management.
* To create awareness on the ability of women in order to expose them worldwide and for them to be partisans in decision making.
* Meeting Lands authority to enable women to have easy access to lands, so as to have maximum protection of the soil, and conserves it properly.

**HOW CAN THE PROMOTION OF GENDER EQUALITY AND WOMEN’S EMPOWERMENT CONTRIBUTE TO SUSTAINABLE SOIL MANAGEMENT AND CONSERVATION.**

* Promotion of gender equality will enhance the participation of women in sustainable soil management and conservation.
* If women are empowered, it will reduce the labor burden of rural women, making them to concentrate more on sustainable soil management and conservation.
* It will make women have easy access to the land they farm.
* Promotion of gender equality and women’s empowerment is crucial for the achievement of a zero hunger world.

**WHICH INTERVENTIONS AT POLICY AND PROJECT/FIELD LEVEL ARE OF UTMOST PRIORITY?**

Policy interventions of utmost Priority include:

* Eliminating discrimination against women in access to agricultural resources, education, extension and financial services, and labor markets.
* Investing in labor-saving and productivity-enhancing technologies and infrastructure to free women’s time for more productive activities; and
* Facilitating the participation of women in flexible, efficient agriculture to enable women to be aware of the economic importance of agriculture because it’s a source of gainful employment.

## Katherine Lofts, Nomomente Institute, Canada

**Mainstreaming gender for sustainable soil management - Nomomente Institute**

1. In your view, what is the relation between sustainable soil use, management and conservation (including soil fertility and health) and gender equality?

Healthy soils are crucial to supporting sustainable agriculture, climate change mitigation and adaptation, and a number of other ecosystem services. In turn, sustainable soil use, management and conservation relies on an understanding of the critical roles that soil plays, as well as on an understanding of women’s role in agriculture and food security.

Because women make up close to half of the global agricultural labour force, ensuring their equality in this realm is vital to sustainable soil use, management and conservation, as well as to meeting many of the Sustainable Development Goals. This means ensuring that women have equal access to opportunities for improving soil health, to land and secure land tenure, and to other resources, as well as addressing the particular constraints that women face. Attention must also be paid to how the intersectional identities of women (including women’s class, ethnicity, age, and status) impact on agricultural practices.

2. What are the distinct roles for women, men, boys and girls in sustainable soil management?

While more rigid rules with respect to the roles of women, men, boys and girls in soil management do exist in some places, there are also differences in understanding in terms of the need for living soils to facilitate sustainable agriculture, as well as with respect to the importance of what we call the “soil village” in raising strong, healthy plants.

3. What are the main gender-based constraints, including unequal gender relations and discriminatory norms that hinder sustainable soil management and contribute to soil degradation? What practical solutions and approaches could help overcoming such barriers?

There are a number of gendered differences and gender-based constraints that hinder sustainable soil management and contribute to soil degradation.

* **Women may have different knowledge concerning agriculture and land management.** This includes traditional knowledge, and may be related to the differing roles of women and men in agricultural practices (for example, land preparation, sowing, pest management, harvesting). Women and men may also be responsible for growing different types of crops, and thus have different knowledge in this regard.
* **Women may face constraints with respect to landholding.** Women often have smaller landholdings and less secure land tenure than men. These factors may impact their ability to control and make decisions concerning agriculture and soil management. Women may also have access to lower quality land than men.
* **Women often lack access to resources.** Women are likely to have lower income or other forms of capital than men. This may impact their ability to invest in agricultural improvements; to access agricultural technologies, equipment and technical information; to access agricultural inputs (organic or chemical); and to engage in longer-term land management activities (versus interventions with more immediate benefits).
* **Women may have competing demands on their labour.** Women often have a range of domestic duties that place constraints on their time, and may limit their ability to implement more time-consuming, labour-intensive agricultural practices.
* **Women and children’s health suffer more in the absence of living soil.**Women and children are more impacted by the lack of microorganisms in the soil in terms of gut health, and may suffer greater health consequences (including anxiety and depression) as a result.

4. How can the promotion of gender equality and women’s empowerment contribute to sustainable soil management and conservation? Which interventions at policy and project/field level are of utmost priority? What are some potential entry points for success?

Given the significant role women play in the global agricultural labour force, promoting greater gender equality and empowering women can lead to improved soil management and conservation.

Possible interventions include:

* Improving soil health understanding and education for women and girls
* Increasing opportunities to learn from grandmothers and other elders, and listening to the traditional knowledge of women, particularly Indigenous women
* Paying greater attention to intersectionality and the multiple ways in which women might be disempowered
* Advocating for more equal land tenure
* Understanding the devastating impact of toxic soil inputs to women’s fertility, reproductive health and offspring

## Colleen Farrell, CARE, United States of America

Climate change is making it more difficult for people in the developing world to escape poverty and protect the natural resources they rely on for food and income. At the same time, tradition keeps too many women from fully participating in the development of their communities and the conservation of biodiversity.

In Mozambique and Tanzania, the [**CARE- WWF Alliance**](https://www.care.org/about/partnerships/care-wwf-alliance) works with women and men in farming and fishing communities, their governments, and private sector partners to develop more just and sustainable food systems; with the strategy of empowering the poorest and most vulnerable women and their communities to (1) manage natural resources and adapt to climate change in ways that pull them out of poverty, and (2) shape local policies and institutions to promote sustainable development and ensure the conservation of biodiversity.

Capacity building is a common approach to promoting best practice adoption in both conservation and development sectors. CARE’s approach to [**Farmer Field and Business Schools (FFBS)**](https://www.care.org/work/world-hunger/agriculture/models/farmers-field-and-business-school-toolkit), prioritizing gender and equity, [in Tanzania](https://careclimatechange.org/wp-content/uploads/2019/08/CARE-WWF-Alliance_learning-brief-3_community-adoption-Nachingwea-Tanzania_FINAL.pdf) reaffirms the power of demonstration and illustrates how Training of Trainers (TOT) can accelerate uptake in a wider geography.

The Alliance’s 2016 baseline assessment in Nachingwea showed that fewer than one-third of farmers practiced even one climate-smart agriculture (CSA) technique. Rather, farmers still practiced traditional slash and burn agriculture to regularly open new fields and prepare the soil for production.

Yet competition for scarce, fertile land and our changing climate make this approach increasingly unsustainable—and even more so for women. Through Alliance FFBSs, farmers learn techniques like the use of crop rotation and improved seeds that are more tolerant to variable rainfall and diseases — that reduce the frequency with which farmers need to open new land while also producing higher yields. In the 2018 season, farmers adopting CSA practices and seeds on their own plots increased sesame production by more than half compared to those using traditional practices and local seeds harvested.

The Alliance has multiplied FFBS impact through TOT at two levels. The Alliance employs a TOT methodology to train both government extension agents and community paraprofessionals to facilitate day-to-day CSA mentoring and FFBS activities with community members. As the learning brief “[*Effective strategies for improving policy implementation and law enforcement at the community and district levels in Tanzania*](https://careclimatechange.org/wp-content/uploads/2019/08/CARE-WWF-Alliance_learning-brief-5_policy-implementation-and-law-enforcement_FINAL.pdf)” explores in greater detail, a 2017 TOT for Nachingwea District Agricultural Officials and Ward Extension Officers also underlines how training influencers, in particular, can create the enabling conditions for wider best practice adoption.

In short, the FFBS model successfully simultaneously empowers women farmers and promotes adoption of CSA because it gives risk-averse farmers a low-risk environment in which to experiment. Through learning-by- doing, FFBS members both build their capacity for technical best practice and collective action. Importantly, through their collective labor, they also witness the tangible benefits of new approaches relative to traditional ones. Moreover, training others to implement the FFBS curriculum or to otherwise promote CSA increases the number of people who learn about CSA.

For another example of CARE-WWF Alliance strategies for empowering marginalized groups and addressing gender inequalities, please reference “[*A rights-based approach to community conservation*](https://careclimatechange.org/wp-content/uploads/2019/08/CARE-WWF-Alliance_learning-brief-2_rights-based-conservation-Nepal_FINAL.pdf)” learning brief focusing on the Hariyo Ban project in Nepal.

## [Mylene Rodríguez Leyton](http://www.fao.org/fsnforum/member/mylene-rodr%C3%ADguez-leyton-0)****,**** Universidad Metropolitana de Barranquilla, Colombia

**Gender perspective in sustainable land management**

Mylene Rodriguez Leyton

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Here I allow myself to share in this forum some ideas-reflections about the relationship of women and the use and sustainable management of land; I start by saying that the sustainable use and management of the land is everyone's responsibility, in that rural women can play a leading role as long as they are able to occupy a place in the family and in society that allows them to develop their human capacities and develop skills and competencies to promote environmental and ecosystem care.

The theme proposed for this forum merits a paradigm shift in the face of understanding the environment, the ecosystem and the role that human beings women and men play as part of it.Integrating two strategic issues for sustainable development such as the gender perspective and environmental management implies generating a thought that allows us to understand the complexity of the man-nature relationship and how it should be mediated by values ​​such as respect and ethics.Let's start by making the relevance of the soil visible as a finite and non-renewable natural resource that fulfills various functions in the ecosystem and in the environment, it is the natural seat for production (Burbano, 2016), it is the source of nutrients for plants in order to produce food and biomass in general; Soil depends directly or indirectly on more than 95% of world food production, therefore, soil degradation is one of the biggest problems that threatens food production on the planet.

Soil is the largest carbon sink in nature, the fixation of carbon by the soil, misnamed "carbon sequestration" or "carbon sequestration" - prevents CO2 from going into the atmosphere, since this is one of the greenhouse gases that promote climate change.The relationship of human beings with the soil represents one of the greatest threats derived from the relationship of "modern man" with the planet through their conceptions and management style, a situation that in 2002, generates the term " Anthropocene ”, to refer to the current era of Earth's history, when human actions are driving with great force, environmental changes, many of which are undesirable for an overpopulated planet, increasingly hot, with intense felling of the forests and unfortunately, with soil degradation. However, there is also hope, when these challenges become opportunities to reinvent and overcome the current situation (Burbano, 2016).

Gender equality defined by UNESCO as "equal rights, responsibilities and opportunities for women and men, and girls and boys" means that rights, obligations and opportunities do not depend on sex with that they were born, gender equality means that they take into account the interests and needs of both women and men, recognizing the diversity of different groups of women and men.Relations between women and men play an important role in human, social and economic development; they have to do with the way they are developed, as well as the evolution and transformation of the values, norms and cultural practices of a society; which, in turn, determine these relationships. In fact, they are relationships that evolve over time and that influence a matrix of socio-economic, political and cultural factors. Changes in the combination of these factors can affect them in a positive or negative way (UNESCO, 2012).

The relationships and roles that women and men play in society also determine how they relate to the ecosystem and the environment, have to do with education, culture and opportunities to participate in the workforce that in the rural environment it translates into participation in agricultural activities closely linked to land use.Participation in the workforce is essential for the social and economic empowerment of people and their communities that offers them more options and resources, as well as greater autonomy to live the life they want.Women play a fundamental role in land management through their participation in family farming (Chiappe, 2005; Ballara, et.al., 2012), this role is documented in various investigations that coincide in identifying the sexual division that occurs in the performance in this activity and the invisibility of the work they performed. Specifically, women's activities are considered to help men and are included in the work carried out by men or heads of household.Among the activities carried out by women in the countryside are agricultural activities selling small-scale products and household chores that may be in addition to their own, the service they provide for other families; they also perform family care activities such as food preparation, child and elderly care, laundry, firewood, water collection, etc; - When there are temporary hiring in the homes, women, in addition to fulfilling their responsibilities in agricultural production, must also guarantee the conditions (food, laundry, house cleaning) so that those who are hired can fulfill their work.

Women participate in the entire process of food production from planting to harvest, but this participation is considered as support for men; the artisanal or almost artisanal processing of food for the sale and distribution of these. According to the study on the situation of rural women in family farming in five countries in Latin America (Chiappe, 2005), the activities assigned to them generally in the productive area of ​​the agricultural sector need qualities conceived in patriarchal cultures to women by the established role both in socialization and in relation to obligations in reproduction.Women have qualities that allow them to participate in agricultural activities such as the “ability to perform repetitive and routine tasks, the ability to perform several tasks at the same time, the ability to associate work with their responsibilities in the field of reproduction, bringing their children with them for the farm ..., due to the responsibilities they have in the domestic sphere, their availability to perform temporary jobs ..., greater availability for the execution of some tasks that require attention to detail, as well as the permanence in a awkward position ..., acceptance of a remuneration relatively lower than the payment given to men ..., greater docility ... ”(Chiappe, 2005: 5).

From the two-dimensional analysis of the activities described above, the sexual division of labor is evidenced in which there is a lack of recognition of the contribution of women as well as distribution in the domestic activities culturally assigned to them.It is observed that although the participation of women during the last three decades has increased both in agricultural activities of land use and in different tasks, gender inequalities remain considerable.

While it is estimated that women represent more than 40% of the active population, they continue to encounter invisible barriers in terms of income and salaries and access to managerial positions, and are very likely to be overrepresented in low-income economic sectors. productivity and / or in the informal economy.The soil is the main element of ecological structures and synthesis of the state of the ecosystem and as such its proper management is essential for the success of other environmental policies. It plays a fundamental role in the sustenance of society and people; therefore, its degradation affects the welfare of the population.

Conservation and sustainable land management are essential to achieve the well-being of the population and is interrelated with the success or failure of numerous public policies, including those related to the agricultural, mining, housing, urban development and water sectors drinking, industry and commerce, transportation and health, among others. Additionally, sustainable land management is essential to consolidate peace processes in countries or regions that have been victims of the armed conflict.The role of women in the use and management of land is related to the processes of family transformation in general in society; For example, in Latin American countries the process is slow, in terms of the consideration of gender equality, of more democratic power relations between the couple and the formation of children, in modifying the stereotypes of the traditional roles of men and women. women, among others, in rural families these transformations are even more distant.

The gap between cultural changes at the social level and the structural transformations of the family is greater in rural families.The preponderance of the authority of the father, motherhood as a central aspect of women's identity, the submission of children to authority and the presence of machismo in the patterns of socialization and cultural relationship, are the aspects that are still strongly supported in family structure and organization.

The new generations are stressed in the processes of family socialization, the processes of formal education, which strengthen this type of relations and the discourse of public policies and cultural change, which promotes relations of equality and democratic patterns among those who decide to form new families.

On the other hand, rural youth appear in the midst of the processes of anchoring new social representations of the rural world and yet decisions are made for them on a daily basis; which on the one hand anchors them to a rural world without expectations for them and on the other encourages them to know new directions without forgetting their culture and rural environment.

The vision of the future of young people contains this double tension.The increase in the years of schooling, a sign of important transformation in the rural world, must be oriented to higher quality processes and social policies in that sense, must overcome the exclusion contained in their own rationality and mediate real inclusion processes to the new ones generations and allow them to find more development opportunities in their own rural environment.Social and political participation in the rural world today is very small and this appears consistent with its traditional structure in which the participation alternatives focus on traditional roles and strengthen sexist and unintegrative cultural patterns.

The process of incorporating women into work in the rural sector has been carried out from the logic of their contribution to the family and not from their own development as a person or subject. In this sense there is also a tension in the new generations, that reaching more schooling and higher education, they can make a difference with the women who preceded them, but on the other hand the same education ties them to the traditional model of subordination to the world of men , based on asymmetric relationships, rather than real democratic and egalitarian patterns.In this sense, the new generations seem to keep in tension, the traditional family vision and the scenarios of modernity, marked by the capitalist model, which promotes the more individualistic perspective, where the individual subject weighs, above the affirmation of a us.

Finally, I consider that the main limitations based on gender are cultural, educational and public policies that not only lead to mental models about the role of rural women as a family member but also in the role they play in the home economics and land cultivation, land use and management; These limitations are generated by unequal gender relations including discriminatory policies and norms that hinder the sustainable management of soils and contribute to their degradation.

Practical solutions and approaches that could help overcome these barriers include raising the level of formal education not only in women but in the new generations of children and young people, implementing public agriculture and rural development policies that improve living conditions and that allow the development of the field linked to local development, which generates attractive scenarios in agricultural activity in such a way that women, young people and the same men see that cultivating the land is a promising activity for their present and for their future.

Sustainable land management policies must be comprehensive policies, articulating rural development, social welfare and human development policies, which include education, training and awareness strategies for sustainable land management, environmental education policies, which are inclusive, not only with the communities, but with their different members, women and men, boys and girls in environmental education activities; it is necessary to educate in a systemic vision of the environment and of the integral formation of the human being in order to strengthen the participatory processes, the installation of technical capacities for the conservation and the sustainable use of the environment, including the soil, beyond its conception merely productive.

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## Barry Cohen, United States of America

In our opinion sustainable soil management first needs to address the global algae bloom and HAB problems affecting rivers, lakes and oceans.  Decades of algae bloom research, testing and monitoring have not fixed any of these devastating problems.

Taking a holistic approach from point or non-point sources, immediate commercial algae bloom remediation and on-going maintenance should be a starting point. Unless there is real commercial remediation of rivers and lakes first along with on-going maintence we will only be throwing good money after bad.

## Hamadoun A. Haidara, AADECOM, Mali

Original contribution in French

La prise en compte du genre suppose une convergence d'actions entre hommes et femmes dans la gestion des sols. L'action collective qui implique les deux permet une gestion plus rationnelle des ressources dont les sols. Le genre ne concerne pas seulement les femmes et c'est pourquoi les hommes doivent accepter de travailler avec les idées et propositions des femmes pour le bien être commun. Les sols sont à protéger et à gérer selon des décisions collectives qui prennent en compte les points de vue et opinions des hommes aussi bien que des femmes.

**English translation**

Gender mainstreaming implies that there must be a convergence of actions between men and women in soil management. Collective action involving both of them allows for more rational management of resources, including soil. Gender is not only a women's issue and therefore men must be willing to work with women's ideas and proposals for a common good. Soils must be protected and managed according to collective decisions which take into account the views and opinions of both men and women.

## Md Zahangir Hossain, University of Newcastle, Australia

Sustainable soil use and management are very much important for improving soil health and quality. To maintain, soil health we need to involve all stakeholders such as producers, consumers and the processing industries. I think everyone can contribute to sustaining soil management as well as soil quality. As we all know the slogan 'Fresh soil, Fresh food'. Therefore we can consider these options: 1) create awareness among the rural people (especially men) for sustainable soil use, management, and conservation (including soil fertility and health) and gender equality; 2) increase wage for women labour (specially in developing countries); 3) motivate the family leader (men) to encourage women to spend money independently in the resilient farming; 4) recycling organic wastes as fertilizer; 5) utilization of marginal biomass to produce biochar (at low temperature) as novel C-based fertilizer;  6) promote reforestation & aforestation in the degraded land; 7) application of women-friendly rules and regulations by the state/country.

## AAM Zowadul Karim Khan, FAO (formerly), Bangladesh

Sustainable soil management includes use of more organic fertilisers, like, vermi compost, which is becoming popular in Bangladesh now. Women can be involved in the production of vermi compost or simple organic compost type fertilisers, which will maintain the health of the soil.

More training can be organised for women for production of vermi compost and other compost type organic fertilisers. On the other hand vermi compost is more suitable for household vegetable cultivation, which is again handled by women.

Thanks.

## John Ede, Ohaha Family Foundation, Nigeria

Gender is a major connect between sustainable soil use and conservation, since most of the post cultivation are often carried out by women and girls, i.e. planting, weeding, and harvesting. There is the need to critically examine weeding and post harvesting practices, to improve on the soil fertility. What happens to the weeds removed, are they gathered and burnt? or are they kept in the farm to be converted to manure, and replenish the soil. After harvesting the crops, what happens to the plant residue? Are they usually left in the farms to manure or gathered and burnt? There is need to teach women to improve on knowledge about soil health through traditional practices that have helped to keep the soil healthy for production despite years of use. Most families still use the inherited lands for Agricultural practices for decades, just by adopting mixed farming techniques, mixed croping, and other traditional practices.

Women and girls are usually not allowed in the community decision making process, and this is a major hinderance to not just women participation, but limits their voices. Women and girls at community level have peer groups, and inviting leaders of women groups to the discusions, conversations, consultations, and decision making at community level, will ensure that women's contributions count, and that women's impact can help improve food production leading to zero hunger.

People-centered programming, there is the need to ask questions especially at community, farm, field level, to help inform decision and policy making. It has been the practice where decisions are made for women, not by women, and until we reverse this trend, we will keep eclising around the same old food shortages, hunger, malnutrition, and the likes.

## John Ede, Ohaha Family Foundation, Nigeria (second contribution)

To promote gender equality and women's empowerment, there is need for information gathering, sharing and capacity building in terms of trainings and consultuations at community level. This will translate to behavioural change and improved farming practices, and better soil management and conservation. Capacy building and strenghtening should be focused at community level, since there is a huge disconnect between policy and implementation and policy translation into the lives of women.

## Andrew Patterson, CARE, United States of America (second contribution)

CARE’s experience has shown that women act as catalysts for change, galvanizing positive effects for those around them. Inequitable social and gender norm barriers impact power structures in households and communities, and women are denied access to resources and knowledge that are instrumental to increase food security. Simultaneously, women are 43% of the farming work force in developing countries, and specifically addressing gender and social barriers improves their chances to sustainably address food insecurity (FAO).

CARE uses a gender-sensitive [Farmer Field Business School](https://www.care.org/work/world-hunger/agriculture/models/farmers-field-and-business-school-toolkit) that addresses harmful inequities head on. The FFBS is a participatory, women-focused extension approach that helps farmers build skills necessary to increase production, access markets, collaborate with each other,  and engage in beneficial and efficient decision making. It also transforms the status and recognition of women by providing the support they require to be successful farmers, business-people, leaders, and agents of change. Evidence shows that participation in the FFBS builds women’s self-confidence and expands their autonomy; reduces gender-based violence; and engenders respect from their families and communities towards them.

Women all-too-often have limited access to knowledge and capacity building Sustainable soil management creates favorable conditions for good crop growth, seed germination, emergent root growth, plant development, crop maturity and formation, and harvest. Sustainable soil management, increased food production and gender equity are inextricably linked together, and the [Farmer Field Business School](https://www.care.org/work/world-hunger/agriculture/models/farmers-field-and-business-school-toolkit) model specifically trains women and men farmers on soil structure, soil moisture, water infiltration, mulching, erosion, weeds, soil organisms, and cover crops, among other topics.

## Rahmi Khalida, Indonesia

Gender Equality in Land Management

The meaning of gender mainstreaming is understood as an effort to increase the equality of the rights of each person, regardless of gender, age and ethnicity. Included in the management of land management. In the concept of the project the ideals of the realization of gender equality as a target of target utilization are arranged in such a way as something that will be seen surface when the project is implemented and of course the most important thing is seen when measured regularly. But sometimes, many people forget that something that wants to be surfaced must have a strong basic support and aim equally at all aspects and levels.

To that end, before we roll into the details of the activities of the expectations we want so that gender equality is seen on the surface, the most important thing is the agreement of the implementation and project management team about the standards to be achieved, the agreement that it is true that everyone has the right to have equal access, participation, benefits and control . This agreement must be agreed upon not just written on the agreement, proposal or project guide but really agreed as a common goal and goal in the name of justice for all.

In land management, which is generally in developing countries, the closest to the profession or business in agriculture, social, cultural, norms, beliefs, community psychology, are the basic things that support what on the surface we call gender characteristics. Another support that will affect the gap is the economic level, where those who have higher resources and socioeconomic levels are easier to control the weak.

Government policies that encourage agricultural development in groups lead to positive and negative things. The gap between land users is still very high, especially for marginal groups such as small farmers, women, youth, and others. Women and youth, yes, they are finally given a little space to have control over land management, but once faced with group decision making, their voices are dim. While land management is generally agreed upon by group decisions.

Finally, membership, management, or usefulness arrangements move in such a way because of the desire to survive, where the strong will survive the weak will be eliminated. In this situation the gap will be clearly seen where generally the ones who control land management or agricultural activities are individuals who have power over the others. Compounded by the state agency or even the government itself does not see the surface of the problem but rather what is seen based on data on paper. As a result, efforts to regulate land management will be a program that is not well targeted.  
In an effort to carry out gender equality efforts at every level, it is very important to pay attention to the social, cultural characteristics and all elements that influence and the approach given will differ from one another with the same goal. In other words, targeting accuracy is also the key to the realization of the ideals of gender equality in land management.

Therefore, there are several important stages in gender mainstreaming efforts in land management.  
1. Gender equality must be a definitive goal, not implicit.

2. Commitments stated in the agreement on land management that every individual has the same rights in land management. It doesn't have to referring to group decisions.

3. Regulations that land management is not intended for exploitative matters, subjectivity towards marginal groups, women and children or people with disabilities, and matters that can damage the environment.  
4. There must be a special budget to equalize perceptions and build gender awareness for all levels of the organizations involved. And this must be decided at the higher level, for example donors, not by the local government.

5. Gender Awareness is given at every level / stakeholder / government / non-government. The facilitator is the main target that is built on gender awareness considering that it is the closest to the land manager. This activity must be agreed by all parties involved in the program related to land management.  
6. Identification of targets clearly and accurately based on data in the field. For example, landowners, both managers and not managers of land management must be involved in the socialization.  
7. Supporting activities or activities, including rewards, championships, youth capacity building and others.

## [Rengalakshmi Raj](http://www.fao.org/fsnforum/member/rengalakshmi-raj-0)****,**** M.S.Swaminathan Research Foundation, India

Dear sir/madam,

In the pre green revolution period women and men have a more or less equal role in soil and land management especially in the post-harvest and non-cropping seasons like removal of perennial weeds and stones, strengthening the bunds, application of FYM and tank silts etc along with a selection of crops and cropping system in the main sowing season. The associated traditional knowledge of soil properties was also rich and gendered. However, after the introduction of chemical fertilizers and intensive farming, the role of women in soil health management has been changing with lesser roles and decision-making power. This is the prevailing scenario irrespective of the ownership of land. Even though women have access to land, adoption of improved technologies is largely constrained by the limited access to recent technologies, institutional linkages to avail inputs and services, social norms that restricts her interaction with outside male service providers and restricted mobility. But this inequality continues now in the context of feminization of labour forces and management in farming in the context of men moving to non-farm livelihoods. This has implications on soil fertility and overall health.

Regards

Rengalakshmi

## Ilaria Sisto and Ronald Vargas, facilitators of the discussion

We would like to thank all the people working in different institutions and countries who already contributed to the discussion on the relevance of mainstreaming gender equality issues for sustainable soil management.

We were glad to see that there is an increasing interest to analyze the complex relationship between environmental and social issues, and how this affects the management of soil and other natural resources. Soil is a non-renewable natural resource that provides multiple ecosystem goods and services, and is a crucial source of food and biomass. This is why proper soil management is essential for the success of environmental and agricultural policies, for the welfare of the population and for reducing conflicts related to natural resources management.

There is a general consensus that sustainable land use and management is the responsibility of everyone, with an increasing recognition that women play a fundamental role in soil management, by participating in family farming and in the entire food production process. Nevertheless, their crucial roles are considered often as support to men and not fully recognized, and are related to the structural transformation of the family, especially in rural communities. Some people have highlighted that women are more concerned with soil conservation, while men often look more at soil exploitation.

Gender inequalities in agriculture and food security remain considerable and require urgent action to ensure women’s equal participation in the sustainable management of soils and in the reduction of soil degradation. In this discussion, several people have also suggested to look at the intersectional identities of women and men, including class, ethnicity, age and status.

A long list of gender-based constraints was identified and many interesting suggestions were made on how to better involve women and youth in soil management, soil conservation and soil health, by investing in their knowledge and skills, providing them with equal access to technologies and practices, promoting collective action, increasing their access to extension and financial services, and labour markets, among many others.

We also acknowledge the recommendations to focus on women’s empowerment, by building their agency, changing relations and transforming structures, addressing systemic gender gaps in resources and capacities to sustainably manage the soil, and providing women with incentives to adopt a sustainable soil management or conservation practice (as indicated by the Voluntary Guidelines for Sustainable Soil Management). Some interesting information was also shared on country initiatives, such as Micronesia where the “taro patches” play an important socio-cultural role to ensure appropriate drainage and soil quality, and are owned by women as guardians of these resources, by adding compost and seaweeds to maintain soil nutrients. In the Pacific islands, to respond to serious threats of climate change to food security, schools are inserting “learning gardens” to introduce innovative agriculture techniques.

We hope to receive in the coming days some additional ideas and recommendations that can help us in developing the Guide on Gender and sustainable soil management.

Ilaria Sisto and Ronald Vargas

## Noah Zimba, Climate Change Alliance, Zambia

Soils as a living resource requires matching feeding attention in order for it to maintain its productive capacities for the good of humankind and ecosystem.

There is no doubt that most of production systems are devoid of encouraging nutritional lifeline of the soil hence causing increasing impairment of its productive capacity. Subsequently there is growing expansion in search of new sites as existing ones become degraded. No wonder both food and nutritional security is at risk with the most vulnerable constituency being women facing the burden of survival.

## Robert Mutisi, Manica Boards and Doors, Zimbabwe

Women have been distanced culturally from owning land and making decisions related to land usage. This has negatively impacted on the efforts from women to engage into sustainable soil management.

Women are more connected to land activities than men if we look at farming. Women in rural areas spend most of their time doing farming whilst men are most of their time at work in towns and still hold on to decisions to be passed on land use and soil management. Even though women spend most of their time in farming activities decision making remains a responsibility for men.

My understanding is that women can as well make right decisions like men if given the space to do so.This space can only be created if men start a new era of seeing things through the gender lens.

## Pedro Rivera Cea, Chirapaq-Centro de Culturas Indígenas del Perú, Peru

**Original contribution in Spanish**

1.-  La relación que se establece entre el uso, la gestión y la conservación sostenible del suelo y la igualdad de género es directa en la medida que son las mujeres las más relacionadas con la provisión de los abonos naturales para los suelos debido a que son ellas las que se identifican con las crianzas familiares de aves, porcinos, ovinos, cuyes, entre otros y contribuyen directamente con un uso racional de los suelos y su condición de fertilidd y salud de los suelos.

2.- Los roles de las mujeres, hombres, niños y niñas en la gestiónm sostenible de los suelos son diferenciados de acuerdo a los roles que de manera tradicional se les encargado. La mujer es la cuidadora de las semillas y a lo largo del año va considerando la condicion de los suelos para los cultivos y se preocupa porque se encuentren guaneados por los animales para que brinden una adecuada producción. El hombre se encarga básicamente de la roturación y labores mas fuertes relacinados a la instlación de los cultivos en las épocas apropiadas y de acuerdo a los indicadores climáticos que se manejan en las comunidades rurales. Los niños y las niñas participan como parte de sus aprendizajes en todas las labores que realizan los padres. Aprenden haciendo las labores de pastoreo o guaneo de las chacras con los animales o crianzas familiares así como las labores relacionadas con la produccción de los suelos para los diversos cultivos.

3.- Las principales limitaciones basadas en el género, incluidas las relaciones desiguales de género y las normas discriminatorias que obstaculizan la gestión sostenible de los suelos y contribuyen a su degradación, son las que tienen que ver con la recargada labor de la mujer respecto que se considera como su responabilidad la crianza de los animales que proveen de guanos de corral a los suelos agricolas destinadas para los cultivos de la familia. La mujer no tiene derecho a usufructuar la tierra comunal y solo el hombre es considerado el jefe de familia, dejando en segundo plano a la mujer. La soluci´n paa por modificar los estatutos de la comunidad donde se otorgue igualdad de derechos sobre la tierra a las mujeres y hombres.

4.- La promoción de la igualdad de genero y el empoderamiento de las mujeres puede contribuir a la gestión y conservación sostenible de los suelos mediante el reconocimiento de las relaciones de desigualdad entre mujer y hombre en los roles productivos, deben revisarse el marco normativo a nivel de comunidades rurales, gobiernos locales y entidades del estado que apoyan los proceos productivos. Es fundamental considerar que es la mujer rural la que juega un rol decisivo en el manejode los recursos naturales a nivel de familia, comunidad y local, para diseñar politicas y accciones que cambien la situación de desigualdad en los roles productivos rurales.

**English translation**

1.- There is a direct relationship between sustainable soil use, management and conservation and gender equality, to the extent that women are most involved in the supply of natural fertilizers for soils. They are the ones identified with the backyard breeding of poultry, pigs, sheep, guinea pigs -among others- and contribute directly to a rational soil use and to maintaining their fertility and health.

2.- The roles for women, men, boys, and girls in sustainable soil management differ according to those traditionally assigned to them. Women are the custodian of seeds and throughout the year they analyse the soil condition for cultivation and ensure it has animal manure to guarantee adequate yields. Men are basically in charge of ploughing and the more physically demanding tasks related to growing crops timely and according to the climatic indicators used in rural communities. Boys and girls participate as part of their learning in all the tasks undertaken by their parents. They learn by grazing or putting guano in the farms with the animals or by raising them at the family level. They also take care of the tasks related to the soils for producing different crops.

3.- The main gender-based constraints -including unequal gender relations and discriminatory norms that hinder the sustainable soil management and contribute to soil degradation- are those related to the overburdened work of women with respect to what is considered to be their responsibility: breeding animals that provide farmyard guano to agricultural soils intended for family crops. Women do not have the right to use the communal land and only men are considered the head of household, overshadowing women as a result. The solution lies in modifying the community statutes, in order to grant equal land rights to both men and women.

4.- The promotion of gender equality and women´s empowerment can contribute to sustainable soil management and conservation, acknowledging the unequal relation between women and men in productive roles. Therefore, the regulatory framework at the level of rural communities, local governments and state entities that support productive processes should be reviewed. Acknowledging that rural women play a decisive role in the management of natural resources at the household, community and local levels is essential to design policies and actions that could change the situation of inequality in rural productive roles.

## [Dinesh Panday](http://www.fao.org/fsnforum/member/dinesh-panday), YPARD, Nepal

Taking reference to Nepal and many other Asian countries, women should be trained (if they have not received yet) so that they can be independent in farming business or make easy access to have resources that can be helpful in better soil management and higher crop production. For example, vermicompost or jholmal (bio-fertilizer, for details: <https://www.cogentoa.com/article/10.1080/23311932.2019.1631026>. Educating women is also that you are improving the quality of food/diet products from the field and family members will be healthier.

To attract more youth, curriculum reform is crucial in many Asian countries. One of the ideas that I was delivering at Youth In Landscape 2015 is “Soil Science Academy in Nepal”-- a networking and capacity building process on attracting the youth to the agriculture landscape by following sustainable soil management practices, for details: <https://www.youtube.com/watch?v=FRO95Z8tua0>.

In summary, youth and women should consider the core shareholders of Sustainable Soil Management and Gender Equality.

## Paolo Groppo, AGTER, Italy

**Original contribution in French**

Comme l’histoire agraire de notre humanité a maintes fois démontré (lire “Histoire des agricultures du monde”), la condition sine-qua-non pour pratiquer l’agriculture sur le long terme a toujours été la reproduction de la fertilité des sols, c’est à dire maintenir (voire améliorer) l’outil de base de la production dans des conditions permettant son usage a des fins productifs. On pourrait dire que la première preoccupation de tout agriculteur, homme ou femme, réside dans le maintien de la fertilité de base - et donc l’invention de techniques le permettant - et seulement ensuite l’invention de techniques productive pour utiliser cette fertilité. Le mot fertilité est ici employé dans le sense non seulement strictement agronomique mais aussi de la biodiversité de l’écosystème dans son ensemble. Preserver la biodiversité, et donc maintenir les haies en bordure des champs, la rotation des cultures, une utilisation de fertilisant “naturels” tant soit peu (guano péruvien par exemple, utilisation du fumier des animaux), nettoyer les fossés en bordures de champs (lire à ce propos le livre “Fossi e cavedagne benedicono le campagne”), garder les différents arbres, enfin l’humanité a eu cette préoccupation en tete depuis que l’agriculture a été inventé.

La question de la degradation des sols intervient donc dans l’ère moderne, quand la mécanisation et la chimisation ont bouleversés les pratiques d’antan. Petit à petit les agriculteurs/trices deviennent des facteurs de production comme tous les autres, soumis à des logiques productives décidées ailleurs et toujours à la recherche d’une augmentation de la productivité physique dans la vaine recherche d’une amélioration du niveau de vie. Comme je l’ai expliqué dans un texte en cours de publication (“Di chi è la terra”), alors qu’une famille paysanne du Centre de la France pouvait survivre - à la fin des années 30 - avec une productivité de 260 quintaux d’équivalents blé par actif, 50 ans plus tard, pour la même survie, il fallait une productivité de 2100 quintaux équivalents blé par actif. Une augmentation de presque huit fois qui seule pouvait être obtenue par une simplification du paysage agraire (élimination des haies, arbres, fossés) et une utilisations poussée d’intrants chimiques, le tout pour maintenir le meme niveau de vie.

L’agriculture dite moderne est donc la principale responsable de cet état de fait, auquel s’ajoute la formation d’un marché unique qui met en compétition des agricultures ayant des conditions de base différentes et inégales.

Sans s’attaquer à ce problème de fond, la recherche de roles différents pour hommes et femmes est risible. Quand une famille paysanne abandonne l’agriculture intensive, la division du travail, si division il y a, est essentiellement le fruit des us et coutumes locales, donc, encore une fois, de l’histoire.

Je ne pense donc pas qu’il y ait, dans l’absolu, des roles différents qui puissent favoriser une gestion plus soutenable des sols. Hommes et femmes paysannes, quand ils sont soumis aux dictats du marché internationale et qu’ils sont pris dans l’étau de l’agriculture “moderne”, c’est-à-dire qu’ils sont devenu des servants d’une forme de production dictée ailleurs, n’ont aucune possibilité de reverdir ce processus, sauf à en sortir. Le changements de mode de production, vers une agro-écologie, pourra donner des résultats, pas en insistant sur des dimensions périphériques au problème.

**English translation**

As the agrarian history of our humanity has repeatedly demonstrated (see "History of world agriculture"), the Sino-qua-non condition for practising agriculture in the long term has always been the reproduction of soil fertility, i.e. maintaining (or even improving) the basic tool of production so that it may be used for productive purposes. It could be said that the first concern of any farmer, male or female, is the preservation of basic fertility and thus the invention of techniques to enable it, and only then the invention of productive techniques to harness this fertility. In this case, the term fertility is used not only in the strictly agronomic sense, but also to refer to the biodiversity of the ecosystem as a whole. Preserving biodiversity, for example, by maintaining hedges at the edge of fields, rotating crops, using "natural" fertilizers (e. g. Peruvian guano, use of animal manure), cleaning ditches at the edge of fields (see the book "Fossi e cavedagne benedicono le campagne"), protecting different trees, etc. is an evidence that this concern has been of interest to humanity since the very first days of agriculture.

The issue of soil degradation arises in the modern era, when mechanization and chemical fertilization have disrupted the practices of the past. Gradually, farmers are becoming factors of production like any other, subject to productive rationales adopted elsewhere and always in search of increased physical productivity in the quest for an improvement in the standard of living. As I explained in a text that is being published ("Di chi è la terra"), whereas in the late 1930s a peasant family in central France could survive with a productivity of 260 quintals of wheat equivalents per worker, 50 years later, the required productivity for the same survival was 2100 quintals of wheat equivalents per worker. This is an increase of almost eight times that could only be achieved by simplifying the agrarian landscape ( removing hedges, trees, ditches) and making more extensive use of chemical inputs, all of which in order to maintain the same standard of living.

The so-called modern agriculture is therefore the main cause of this situation, combined with the formation of a single market that puts farmers with different and unequal basic conditions in competition with one another.

As long as this fundamental problem is not addressed, the search for different roles for men and women is absurd. Wheneverer a peasant family abandons intensive agriculture, the division of labour, if any, is essentially the result of local customs and habits, and therefore, once again, of history..

So I do not think that there are, in absolute terms, different roles that could foster a more sustainable soil management. When they are subject to the dictates of the international market and caught in the vice of "modern" agriculture, i.e. when they have become servants of a form of production dictated elsewhere, peasants, men and women alike, have no possibility of reversing this process, except by escaping from it. Results could be achieved by shifting production methods towards agro-ecology, not by emphasizing marginal dimensions of the issue.

## [Pabitra Paramanya](http://www.fao.org/fsnforum/member/pabitra-paramanya)****,**** Mennonite Central Committee, India

Dear FSN forum,

I believe that gender equality and sustainable soil management is deeply interconnected. In my project context in India, I have experienced that when men and women work together at farm it becomes more productive for them and society.

In one of my project in eastern India, I have done some trend analysis and found that women used to carry food to the field for men and gradually they started getting involved in farming. Further women's involvement started happening through more decision making oriented.

So, here is lot of scope that if we build farming skill of women members simultaneously with men, then both can take decision on what kind of seed to be purchased, what kind of soil management need to be followed, what kind of mulching mechanism need to followed, what amount of organic compost need to be applied in gardening  etc.

Many a times, we silently ignore the women's capacity building though they manage that work. E.g. in one project, my partner used to install vermi-compost pit just beside the farm house to produce quality compost and apply into the gardening. Partner have conducted many training /awareness program where women's participation was only 8 percent. Interestingly the women only put the waste into the compost pit, manage the whole process till compost ready stage. But our partner never thought (in 3 years) to build their skill on compost application for better soil health management. So, this knowledge gap is not conducive for soil health management.

On other perspective, the ownership on land also a big factor which is remain neglected in many cases. But when a small farm families holds the lands (even tiny plots) there will be higher chances to see that women and men happily involved in farm operations. Even if we provide training, they show keen interest to adopt good agronomic practices because they know that they could easily apply on their own plots. So, land ownership and acknowledging women member's role could bridge between gender equality and soil health management.

Sometimes, we have experienced that women members always try to do something related with gardening in small plot and maintain livestock at home. Whereas men try to focus on large scale farming like rice/wheat/corn etc. So, integration is required into their ideology that soil as whole as unique resources and caring all God's creation in soil need to save.

Ultimately similar understanding and participation in program, land ownership process, conflict resolution skill on land issues, gender specific strategy for all kinds of agro-input distributions, uses of easy farm tools to reduced drudgery etc. could play vital role in gender equality and soil management.

Regards

## Xavier Bouan, FAO, Myanmar

**Myanmar SLM project contribution**

1. In your view, what is the relation between sustainable soil use, management and conservation (including soil fertility and health) and gender equality?

In my point of view, it depends on the location. To understand this relation, one needs to first list  the soil management practices/activities carried out in a specific place, and then  to analyze  gender roles and women participation/equality in the context of these specific activities.

2. What are the distinct roles for women, men, boys and girls in sustainable soil management?

Normally here in Myanmar, the farm activities have been carried out by unpaid family labor. In some cases, paid labor is also applied. Whether it is paid labor or unpaid family labour, similarly we will need to analyze the activity by gender roles; women, men, boys, and girls. According to these figures, we could know the distinct roles in terms of gender for each category.

3. What are the main gender-based constraints, including unequal gender relations and discriminatory norms that hinder sustainable soil management and contribute to soil degradation? What practical solutions and approaches could help to overcome such barriers?

Again, it depends on the location, for example, we are applying SALT (Sloping Agriculture Land Technology) in Chin State which is a sustainable soil management practice. First, the farmers (he/she) should own the land (land tenure security). The second important thing is investment because soil management practices are normally costly in terms of money and labor as well. It also depends on other factors; whether sustainable soil management techniques are accessible/feasible (for example – guidance by staff of the department of agriculture/INGO/LNGO), whether farmers can have alternative income sources, and farmers’ personal interest and willingness to do so, etc.

4. How can the promotion of gender equality and women’s empowerment contribute to sustainable soil management and conservation? Which interventions at policy and project/field level are of utmost priority? What are some potential entry points for success?

* The entry point for the policy level will be; we must show/present the success/achievement at the project level in terms of figure/data.
* For example; as I was staff of SCI (Save the Children International) one of the INGOs, the Myanmar government allowed 3 months for maternity leave before. It is extended by Myanmar Government up to 6 months after SCI approved the benefit of the 6-month period of maternity leave and approached at policy level.
* Similarly, regarding cash provision to pregnant/lactating women with children under the age of 2 years, SCI studied two groups in the pilot township in Rakhine State in Myanmar. One group (30 villages) has received only training for nutrition and hygiene practices (which we called the “control group”), another group (another 30 villages) has received both the same training (for nutrition and hygiene practices) and cash provision (15000 MMK/month/mother) to fully nourish their babies. The positive results (healthy baby, normal height of children, no stunting, etc.) achieved by the provision of training plus cash, has led SCI to broaden the implementation area in the Rakhine State. In 2018, the government extends a similar implementation in the whole Chin State of Myanmar through government channels.
* I think that gender equality is not much of a problem in our case. But we will need to work for women empowerment.

## Amanullah, Department of Agronomy, The University of Agriculture Peshawar, Pakistan

Very good topic indeed. SSM is very important everywhere and every time. The role of both women and men are important. In some parts of the world women are not allowed to work in the field. So in these areas awareness and training of girls in school is very important. I will suggest that SSM practices lessons needs to be included in science books at school level. In some back ward and neglected areas awareness of both women and men are important. The importance of SSM even not clear to policy makers, extension officers and field assistants etc. The training of field assistant and extension officers are very important because they have close links with male formers. In Islamic point of view, the importance of soil is reported in many places in the Holy Book of Quran. I think ulema/imam/and religious people also play a significant role in the training of all communities through loud speakers and mass media etc., thanks.

## Altaf Hossain, Soil Resource Development Institute (SRDI), Bangladesh

**In your view, what is the relation between sustainable soil use, management and conservation (including soil fertility and health) and gender equality?**

Reply: In the verse of Prophet Muhmmad SAW (Al Hadith) it is said that Adam was first given the knowledge of agriculture. Eve used to hold seeds of wheat while Adam was spreading the seeds in the field. The soil was so fertile that within hours of sowing they could harvest wheat to meet their daily requirement. So, the role of woman in sustainable soil use, management and conservation is a pre-historical agenda. In South Asian villages woman are engaged in preserving cowdung, farm refuses in a pit. They dry and clean the harvested seeds usually by winowing (blowing) with a handy devise (locally known as Kula).

**What are the distinct roles for women, men, boys and girls in sustainable soil management?**

Woman’s encourage family members to preserve use the soils properly and keep it healthy for future generation.

Man will decide what to cultivate on which land and all the management decisions in consultation with family members.

Boys and girls will cooperate with their parents in conducting sustainable soil management practices.

**What are the main gender-based constraints, including unequal gender relations and discriminatory norms that hinder sustainable soil management and contribute to soil degradation? What practical solutions and approaches could help overcoming such barriers?**

Woman and children are usually left behind during decision making processes. This culture should be changed with inclusive approach. Every family member would like to give his/her opinion regarding sustainable soil management issues.

Family farm may be given a cooperative structure each family member having a definite role and capacity to realize that.

**How can the promotion of gender equality and women’s empowerment contribute to sustainable soil management and conservation? Which interventions at policy and project/field level are of utmost priority? What are some potential entry points for success?**

Family farms should be given a formal structure- a family business. Each family members should be given a definite role and should be up scaled to perform that role. They would fix their cultural practices incorporating good agricultural practices (GAP).

Policy should be fixed to encourage farm owners to adopt GAP with incentive packages.

Farm products may be given price support if the farm adopt GAP.

## Ayşen Sema Tekin, Freelance advisor, Turkey

When soil conservation is considered as a priority natural resource, it is necessary to first look at who owns the land as property. If women own the property of the land, it may be important who the decision maker is. Both female and male farmers can share work and solidarity for the protection and sustainable management of the fertility of the land they own. Usually female farmers undertake planting and harvesting, while male farmers undertake tillage. Resident farmers know that sustaining agriculture on land acquired through inheritance or acquisitions depends on good land management. However, it is important to support them in terms of methods. Farmers may not be willing to be informed if they use land as annual tenants or seasonal workers.

My best ,

Aysen Sema TEKIN

Agricultural Engineer

Ankara-Türkiye