Coffee has its genetic hearth in the south west highlands of Ethiopia. This is where Arabica coffee originated and was first domesticated. The forests with this globally important wild coffee genetic resource are under threat from deforestation and enhancement planting of high yielding coffee varieties.

Government resources were, and are, limited and the traditional approach to in situ conservation, based on a protectionist view (zonation and control of the activities of the local communities) does not have a good record. In particular, excluding communities from forests to “protect” the genetic resources has often had negative results.

The WCC project is testing a different approach to in situ conservation of wild coffee by exploring the potential of Participatory Forest Management (PFM). In this approach the local people are seen as part of the solution, not part of the problem. Rather than protecting the forest from the people, as has happened in the past, local people are empowered to sustainably manage the forest.

Wild Coffee Conservation (WCC) Project
Exploring the potential of PFM to support in-situ conservation

WCC Project Aims
The six-year WCC project aims to contribute to the conservation of coffee biodiversity through the application of fine-tuned PFM procedures. This seeks to achieve sustainable ways of conserving this biodiversity in situ with joint (community and government) management and benefit sharing mechanisms. This involves empowering local communities to manage their forest resources and develop sustainable use regimes to increase household income from non-timber forest products whilst maintaining and monitoring the wild coffee genetic pool.
Beneficiaries

- The local community: approx. 30,000 people living in or near to the forest containing wild coffee plants;
- The project works directly with over 5700 individuals who are involved in Forest Management Groups (FMGs) and marketing co-operatives established by the project;
- Women benefit from protection of the forest, reducing the burden of firewood and water collection. They and minority ethnic community members are included in the leadership of the forest management organisations;
- Government and international agencies involved with forest management and biodiversity conservation;
- Other donor projects, Civil Society Organisations/NGOs and education centres involved in PFM, natural resource and biodiversity issues, and in situ conservation initiatives in the country;
- The global coffee trading and coffee drinking community which benefits from the conservation of critically important wild coffee genetic resources.

Location

The project works in the Southern Nations Nationalities and Peoples Region (SNNPR) in Bench Maji Zone and Sheka Zone in four woredas (Sheko, North Bench, Yeki and Guraferda) with 55 Forest Management Groups operating at the got (village) level, who live in and around three important forest areas, Kontir Berhan and Amora Gedel in Sheko, and Guraferda forest in Guraferda.

Woredas of Wild Coffee Conservation by Participatory Forest Management Project 2015

WCC Project Approach

The project works with local communities and government officials in the application of fine-tuned PFM procedures in order to maintain the stands of wild coffee. Specific aspects of the Project’s approach include:

- Empowerment of communities to own and manage the forest for their own benefit and to protect and maintain national resources, notably the wild coffee genetic resources;
- Facilitating role of the project to support the communities and government to develop and undertake lead activities, with flexible management based on self monitoring and needs assessment;
- Capacity building of communities and their organisations as well as government staff in forest management, value chain development and organisational development;
- Landscape approach - taking account of the linkages between different components in the landscape, homesteads and back yard gardens, field and grazing land, intensively managed coffee forest and natural forest with limited disturbance of wild coffee in situ;
- Gender sensitivity: equal opportunities for different stakeholders;
- Use of field experience in support of policy development.
Results

Participatory forest Management Agreements
• 55 got-level Forest Management Groups (FMGs) established as branches of four woreda level Forest Management Associations (FMAs); all undertaking PFM activities and in situ conservation of the coffee genetic resources;
• 60,200 hectares of natural forest and 16,300 hectares of coffee forest managed under PFM agreements;
• Wide recognition at community level of the value of a PFM approach in helping communities protect their forests;
• PFM methods fine-tuned and applied for co-management of forests to ensure conservation of wild coffee biodiversity.

Impact on Forest Resources
To assess the effectiveness of in situ PFM the project monitored changes in land cover, carbon stock and biodiversity. Baselines for these indicators were established in 2010 and changes assessed in 2015. Results all point to PFM having a positive impact on the conservation of natural forest and biodiversity.
• 1.08% forest loss in project area over six years compared with a 15.57% forest loss in non-project areas;
• Natural forest shows increases in total biomass, carbon stock and CO$_2$ sequestered. Coffee forest (found on the fringe of the natural forest and modified to favour coffee stands) shows decreases in total biomass, carbon stock and CO$_2$ sequestered;
• Biodiversity analysis of the natural forest revealed an 8% increase in woody plant density, a 20% increase in the basal area of tree species and the presence of good regeneration and recruitment characteristic of healthy vegetation;
• Anecdotal evidence that forest fires and illegal forest clearance activities reduced.

Enterprise & Livelihood Development
• Three forest product co-operatives established marketing wild coffee, forest coffee and honey with national and international links developed and products sold to Addis Ababa and Europe;
• Wild coffee has been sold for the highest price ever for sun-dried coffee in Ethiopia - three times the average non-wild price;
• Livelihoods strengthened through improved market linkages to Addis Ababa and internationally;
• Landscape management regimes for sustainable use of forest and farm land developed;

Policy Development
• Support for forest policy development and exploring the linking of PFM to biodiversity conservation in the SNNPRS region and federally.

Looking Forward
The positive results achieved by the WCC project are being extend and developed further by the group. For further information and to get involved in this please contact: Fiona Hesselden or Matt Snell at csrc@hud.ac.uk +44 1484 1367.
Global Importance of Wild Coffee Conservation and the South West Highland Forests

Several prime forests with wild coffee are found in Bench Maji Zone. This genetic hearth of Arabica coffee needs to be maintained for the world’s coffee drinkers and producers given the narrow genetic range of the commercially produced crop. This genetic resource is part of the incredible value of the forests of South West Ethiopia which, beyond their unique biodiversity, play a critical role as a water tower for the River Nile – serving lowland Ethiopia, South Sudan and Egypt, storing carbon to stabilise climate and enhancing rainfall upwind into the northern highlands of Ethiopia. Hence these forests provide ecosystem services of local, regional and global significance.

South West Forest and Landscape Grouping

The South West Forest and Landscape Grouping (SWFLG), which manages the WCC-PFM Project, is an informal grouping which seeks to enhance the resilience of communities, societies, economies and environments in South West Ethiopia, improving ability to address many challenges, such as climate change, economic fluctuations and demographic dynamics.

Members include
• University of Huddersfield: Centre for Sustainable and Resilient Communities (CSRC) (UK)
• Ethio-Wetlands and Natural Resources Association (EWNRA) (Ethiopia)
• Sustainable Livelihood Action (SLA) / Wetland Action (WA) EEIG (Netherlands)

Current SWFLG members have worked together on projects funded by the EU and other international donors since 1996 and have built up expertise in livelihood development and resource management. Other organisations are encouraged to join the Grouping. (Contact: Prof Adrian Wood: a.p.wood@hud.ac.uk). CSRC and Wetland Action are involved in similar groupings in other parts of Africa focusing on landscape-based work, including Functional Landscape Approach training.

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‘If the forest disappears, no one can live here... the most important thing is to protect the forest’

So said Abebaw Hassen, farmer and member of his local FMG. But it was not always like this. When he came to the area in 1996 “the forest was suffering an invasion. Farmers were stealing it and clearing the land.” Since then, with the support of the WCC-PFM project, responsibility for managing and protecting the forest lies with the local FMG. Abebaw says “The forest [now] belongs to the community... It is after that happened, after the community took ownership, that they gained the awareness... After the handing over, the forest is in much better condition than before. It is being monitored. Villagers organize security patrols every fortnight”.

The community is working hard to protect the wild coffee, ensuring the coffee seedlings are left to sprout and canopy trees given space to grow and provide shade. Abebaw puts this change down to raised awareness amongst farmers of the need to protect the forest and wild coffee: “inside the forest there are some locations that are open, exposed. In those places, because of the awareness that has been raised, you find that the farmers have planted different types of trees, and they are growing now, indigenous trees that will grow large... it is very good”.

SWFLG