



A woman farmer
plants trees in
her field.
© Tony Simons

In rural Africa, women are often not only mothers and housekeepers; they are farmers and foresters too. These women are largely illiterate and cannot access conventional agroforestry reference materials. They can, however, learn farming techniques from picture-book manuals.

Learning through pictures: a resource for women farmers

Women in developing countries often play a central role in rural land management. Take Binta Bojang, for example. Binta lives in Dobang Kunda in The Gambia and tends to rice fields, vegetables and tree gardens on land up to 2km from her home. She also looks after six of her own children and other members of her family too. Binta combines the demands of motherhood with farming skills learnt through practical example from older generations, friends and fellow villagers and, like 84 million other women across Sub-Saharan Africa, is illiterate.

In Sub-Saharan Africa, 46 per cent of women, compared with 31 per cent of men, are illiterate.¹ This low level of literacy among women, both in Africa and in other parts of the developing world, presents a challenge to field staff involved

in natural resource management and development programmes. These staff cannot rely on written training manuals and other conventional resources of the West to inform illiterate women farmers about farming and forestry techniques.

Face to face training sessions are an effective alternative method of communicating new ideas to women farmers. For these sessions, groups of women, often with their babies, gather in the shade of a large tree in the village or on farmland. Here, development workers discuss with the women new farming and forestry techniques. Where possible, field staff will use posters and flip charts to help convey a message. However, with no follow-up resources, women can feel uncertain about what they have learnt and lack the confidence to try out new techniques.



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There is a clear need for accessible reference material to reinforce the ideas developed by women farmers during training sessions. For this reason, the UK Department for International Development's (DFID) Forestry Research Programme (FRP) funded the Institute of Ecology and Resource Management at the University of Edinburgh to research and develop a methodology for producing visual training manuals on agroforestry and other subjects. This research directly addresses Target 4 of the UN Millennium Goals, which aims to "eliminate gender disparity in ... all levels of education no later than 2015".

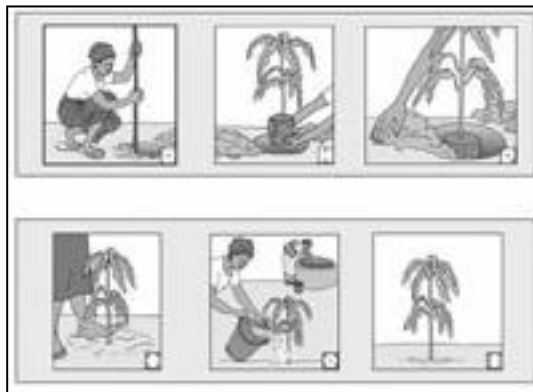
Developing a visual manual

The FRP-funded research team, led by Rose Clarkson, worked initially with 62 illiterate and semi-illiterate women in The Gambia, West Africa, to develop a visual manual in agroforestry techniques.² These women represented four different language groups, namely the Mandinka, Fula, Diola and Wolof tribes.

The first step of the research was to consult with the women to identify which agroforestry techniques were suitable for communication by visual means. Like many rural people, the women were unused to seeing and interpreting illustrations, so the researchers first had to determine the type of illustration that would, for them, clearly illustrate the subjects. This was achieved

"The manual can help any Gambian woman farmer do their work better. The use of neem tree to control pests against food crops and [the production of] mango jam and cashew pancakes are of great interest to us."

Borry Tamba.
Woman farmer, Pirang village, The Gambia.



Visual imagery helps communicate agroforestry techniques. © Rose Clarkson

by enlisting the skills of a local artist. The illustrations were then used to develop an agroforestry manual that was tested for one year by a local field worker working with around 140 women in four regions of The Gambia.³

Communicating agroforestry techniques to women farmers

The agroforestry manual has helped women farmers in The Gambia, and also Ghana and other West African countries, to integrate tree planting into their farming practices. As a result, women like Binta have planted cashew (*Anacardium occidentale*), neverdie (*Moringa oleifera*), papaya (*Carica papaya*) and other tree species. They have also learnt techniques such as planting and fertilising tree seedlings, using trees as live fences and making cashew pancakes and jam from fruits of the mango tree (*Mangifera indica*). These techniques all help improve the productivity of the smallholdings from which women and their families make their livelihoods.

Initially, 560 copies of the agroforestry manual were distributed to farmers in The Gambia, Ghana and other countries worldwide. More recently, orders for the manual have been taken via the Illustrated Manuals for Development Projects (IMDP) web site, www.imdp.org.uk.

Rose Clarkson and her team aimed to provide women of The Gambia with agroforestry information that they could easily understand and which would complement any practical training they might receive. More importantly, the experience of producing the manual enabled the researchers to develop a replicable methodology. This methodology can be used by non-governmental organisations (NGOs) to create, for use in their own countries, visual training materials in a wide range of development subjects.⁴

Encouraging the use of visual training techniques

250 copies of the methodology for producing visual training materials were distributed to local field staff, NGOs and government departments in The Gambia.⁵ Follow on work to the FRP-funded project, funded by the European Union, included a pilot study in The Gambia and Ghana, in which this methodology was further refined into a handbook for development workers.⁵

Twelve African government departments and local NGOs were involved with the IMDP pilot study. Several groups have gone on to produce their own visual training manuals on subjects as diverse as applying chicken manure and improving the efficiency of household stoves (see box). This development proves that the medium of visual training materials is not confined to agroforestry but can be used to communicate a range of agricultural and economic activities.

Although the methodology for developing visual training manuals has so far been applied by organisations working in West Africa, it could easily be used further afield in other countries where rural literacy levels are low. For example, development organisations working in Uganda and Tanzania have expressed an interest in

Manuals produced by African partners in the IMDP project

ORGANISATION	COUNTRY	SUBJECT
Collaborative Forest Management Unit	Ghana	Tree seed collection and seedlings production
Non-formal Education Division, Ministry of Education	Ghana	Producing "gari", a food-stuff from the cassava plant (<i>Manihot esculenta</i>)
Dept. of Agriculture	Ghana	Chicken manure for crops
Dept. of Agricultural Services, Food and Nutrition Unit	The Gambia	Weaning food and rice production
Forestry Dept. and NACO Forestry	The Gambia	Producing tree seedlings
Dept. of Community Development	The Gambia	Tie-dye for textiles
Ghana Association for the Conservation of Nature (GACON)	Ghana	Improved stoves
31st December Women's Movement	Ghana	Mango and pepper

applying illustration techniques to their own work.

Downloadable versions of the various manuals, as well as the handbook for development workers, are now available on the IMDP web site. This web site is therefore a key resource in helping local development agencies produce their own manuals in the future.



Women farmers in Ghana learn forestry techniques.

 © William Hawthorne

Creating sustainable livelihoods

The research carried out by Rose Clarkson and her team in Edinburgh and The Gambia complies with the core principles of the Sustainable Livelihoods Approach (SLA) advocated by DFID. Firstly, the research is

“The manual is a great asset in the transfer of technology to illiterate farmers, especially women. As a result, the Unit got involved at the early part of its development and has since followed with keen interest”.

*Isatou Jobe-Sise
Food and Nutrition Unit,
Department of Agricultural Services, The Gambia.*

people-centred, taking illiterate women farmers at its focus. Secondly, the research is **responsive** to the needs of these women, recognising their need for a form of education that is not based around the written word. The research team was specifically responsive to farming needs in The Gambia as it provided information on particular species of fruit and nut trees identified by the women themselves.

Participation was also key to the research, which involved farmers from the main tribal groups in The Gambia. Much of the project work was carried out in villages where Rose Clarkson, the project leader, had a good working relationship with local women and was likely to obtain an honest response when testing different forms of visual imagery. Likewise, the field testing of the agroforestry manual was carried out by field workers who lived in the villages and were known and respected by the local community.

The FRP-funded research took a **multi-level** approach. It both used visual training techniques to inform women

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farmers in The Gambia, and encouraged local NGOs and government departments to adopt these techniques. **Partnership** working was instrumental in the success of this approach, which involved consultations with the Department of Agricultural Services, the Nutrition Unit and other government departments of The Gambia as well as NGOs such as the Methodist Mission, the Catholic Relief Service and Voluntary Service Overseas.

Finally, the research on visual agroforestry manuals is firmly entrenched in the ethos of **sustainability**. By developing a methodology for communicating agroforestry techniques to women, the team helped ensure that the environmental benefits of planting trees within an agricultural crop system are fully realised. Women in rural West Africa lead a **dynamic** lifestyle, juggling child care with farming, and are key players in rural communities; only by including their needs in educational development programmes can the Sustainable Livelihoods Approach effectively be implemented.

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