



Understanding gender roles and practices in innovation processes: A case study of Banana Xanthomonas Wilt (BXW) disease management in Burundi



Iradukunda Francois^{*1}, Bullock Renee³, Rietveld Anne² and van Schagen Boudy¹

¹Bioversity International, Bujumbura, Burundi

²Bioversity International, Kampala, Uganda

³International Institute for Tropical Agriculture, Bukavu, DRC

*presenting author: Iradukunda Francois iradukunda@cgiar.org



INTRODUCTION

- **Banana Xanthomonas Wilt (BXW)** is a bacterial banana disease that threatens household income and food security in Burundi.
- **Complete mat removal (CMR)**, the primary recommendation of BXW control package was reported too tedious and time-consuming by farmers
- **Single disease stem removal (SDSR)** is a new labor-saving practice that has been introduced to improve BXW control.
- **The gender roles** affect the potential to control and reduce BXW spread

AIM

Better understand :

- Gender dynamics In banana cropping systems,
- Knowledge transfer at household and community level
- How these could influence the scaling up of SDSR to manage BXW

MATERIAL AND METHODS

Site & context of the study

- North-east Burundi, within the framework of USAID-funded Program entitled "AMASHIGA"
- Bioversity International was contracted to control of BXW using SDSR approach
- **Farmers learning groups (FLGs)** have been created in pilot sites as a frame of information sharing regarding BXW management
- GREAT (Gender-Responsive Researchers Equipped for Agricultural Transformation) trained Bioversity researchers in the theory and practice of gender-responsive research on RTB crops.
- The team successfully competed for a seed grant to apply knowledge and skills received on a gender research topic.

Data collection

- Qualitative data collection methods were used
- 8 focus groups discussions, 6 key informant interviews and 57 transcript contents from (FLGs) meetings.
- The key informants provided details about their community in terms of the banana production system, previous BXW management, the sources and modes of information dissemination etc.
- The purpose of the FGDs was to better understand gender dynamics in banana cropping systems and access to knowledge

Data analysis

- Data were analysed using Nvivo 10 software
- Content analysis was performed using a combination of deductive and inductive approaches

RESULTS

Gender dynamics in banana cropping system

- Cash and food crops are often intercropped in banana-based farming systems. Cash crops are associated with men and food crops associated with women
- Men and women prefer banana cultivars based on the use that is linked to gender roles:
 - ✓ Banana beer is preferred by men, who typically manage income from it in married households.
 - ✓ Women prefer cooking varieties because of their roles in household's food consumption.
- While some men considered that the use of money resulting from banana becomes the decision of man without consulting his wife, others found that it is wise to inform his wife about the banana sales to motivate her to continue working in the banana plantation.

Access to knowledge & information between men and women

- Banana and disease management tasks are often carried out by men; thus men are generally targeted as recipients for trainings and information.
- Women attend meetings/trainings when their husbands are unable or refuse to attend.
- Men prefer to attend meetings when they realize direct economic benefits e.g. per diems
- women's mobility when compared to men, is limited because of their roles and responsibilities that are associated with household and reproductive tasks

Household knowledge transfer and innovation uptake

- Within FLG members applying SDSR to manage BXW, a limited intra-household sharing of information has been observed.
- Even when information is shared, men claimed that SDSR practices are not necessary implemented by their wives
- However, women's activities on annual crops associated with banana, are seen as opportunities to use SDSR practices to control BXW
- A woman in FGD said "it is time to break with culture, women can do the work on banana"

Community knowledge transfer and innovation uptake

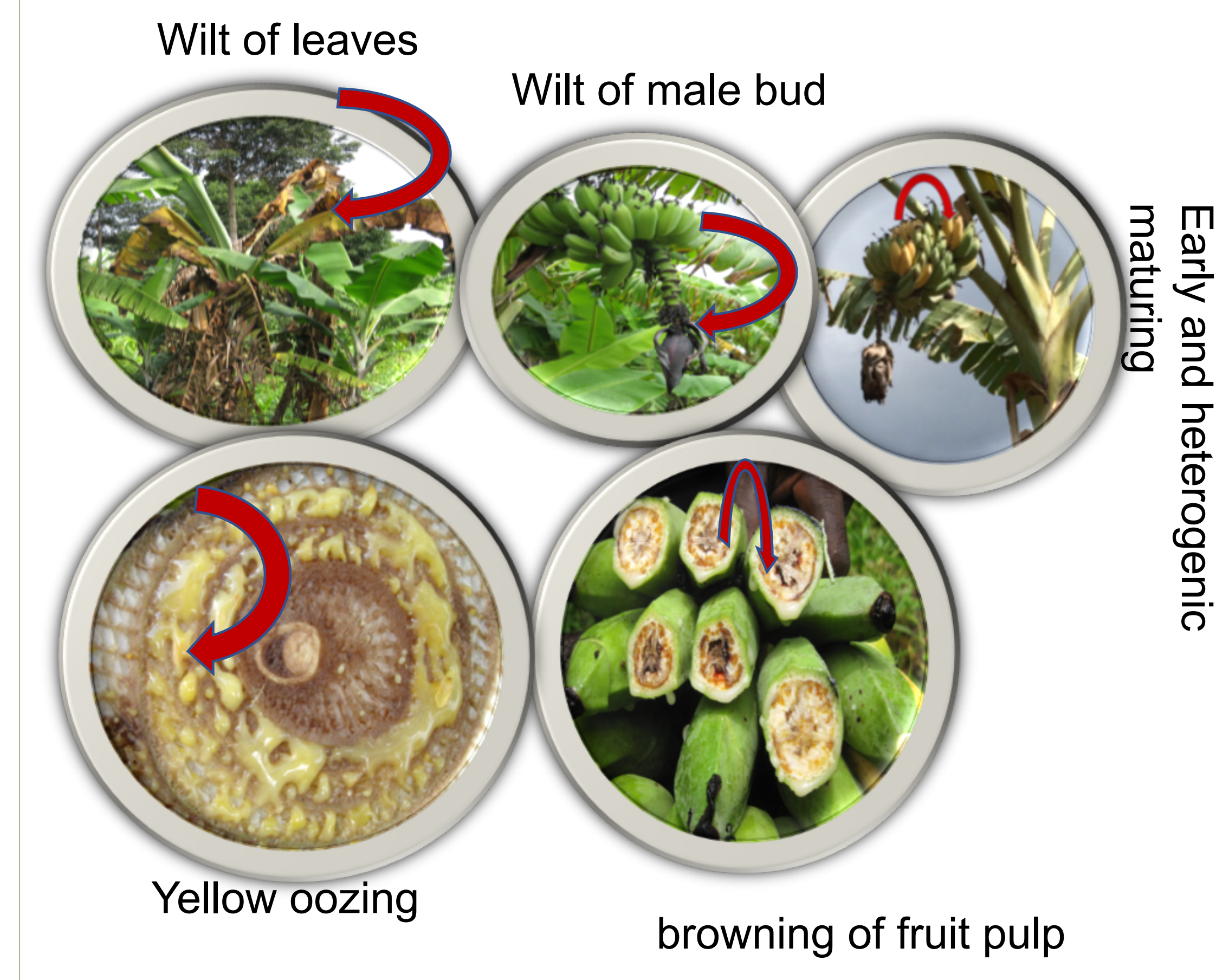
- Information sharing from FLG members to non-members in the community serves as important way to disseminate SDSR practices.
- However, in some circumstances non-members do not heed advices of members
- FLG members are not recognized by community members as being knowledgeable of SDSR
- Neighbors' failure to manage the disease affects activities of those who make concerted effort to manage BXW in the community

CONCLUSION

- Research to investigate gender in systems is essential to ensure that approaches do not cause undue harm that undermines women's empowerment and smallholder livelihoods.
- A "one size fits all" approach towards the introduction and scaling of innovations will likely deepen gender inequality in gender unequal contexts.
- Gender roles clearly have implications for managing BXW and scaling methods to control the disease
- Access to agricultural knowledge is gendered. Limitations to access the source of information is closely linked to gender specific role in agriculture

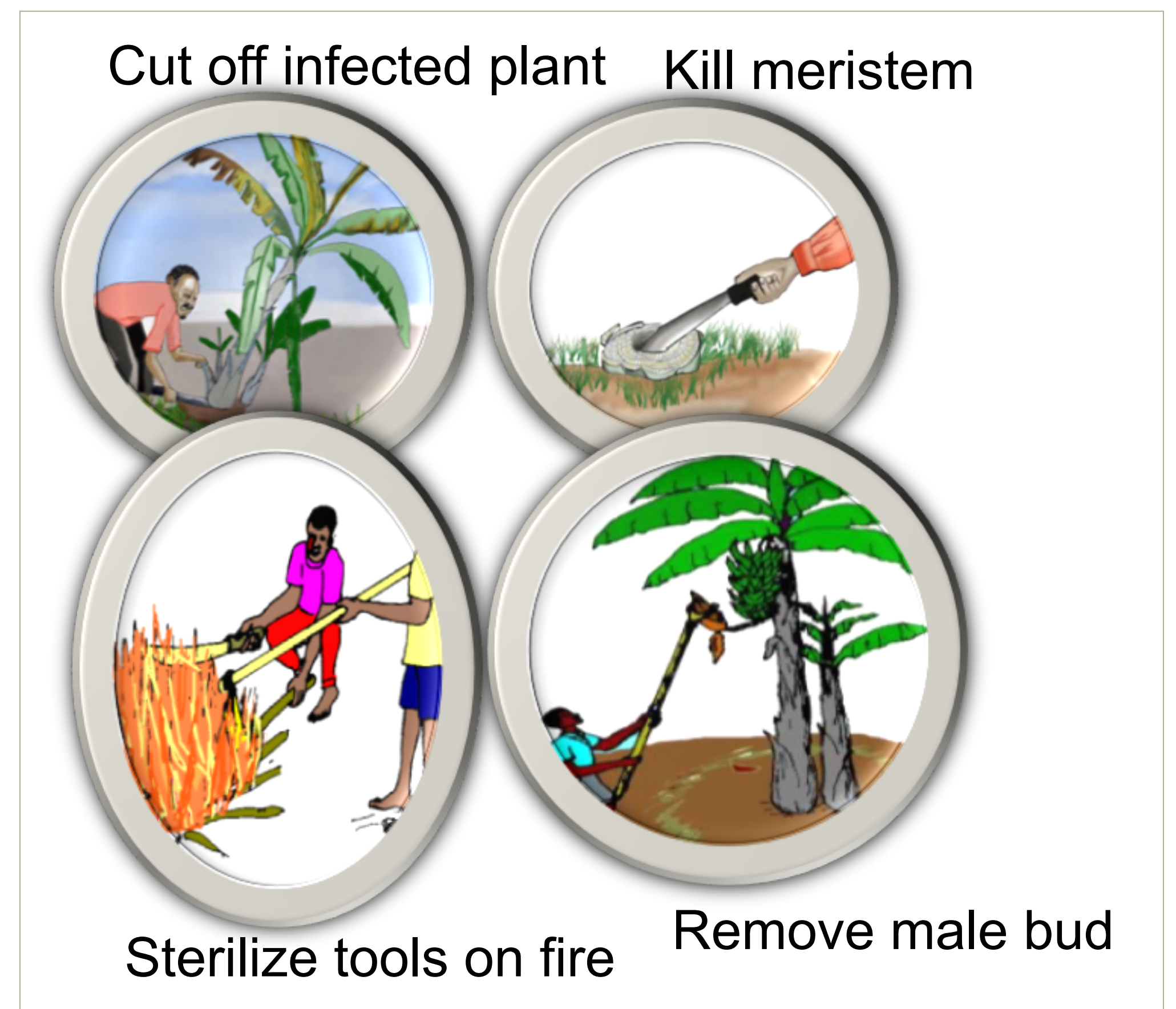
FROM DISEASE TO CONTROL USING SDSR

BXW Symptoms recognition

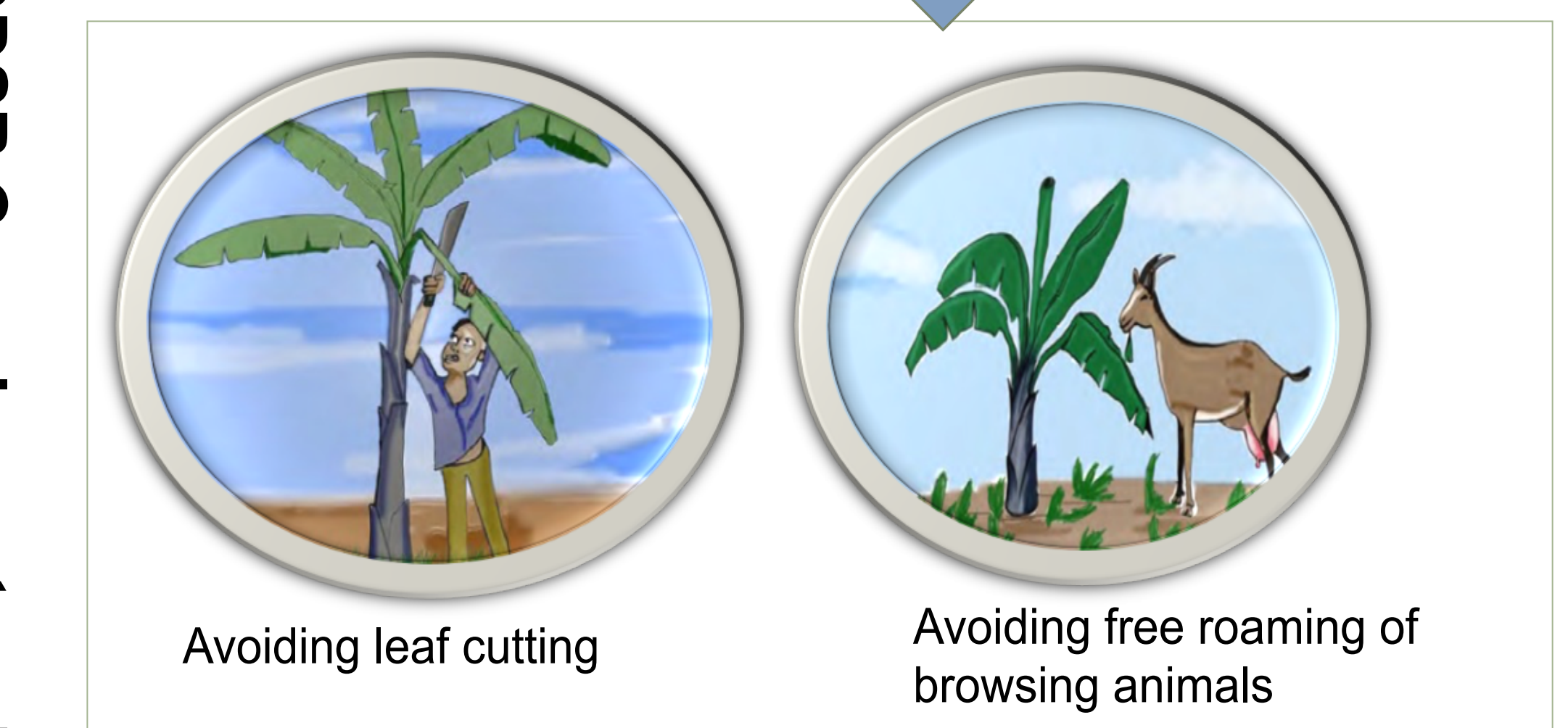


Regular field visit

SDSR core Practices



SDSR Complementary Practices



REFERENCES

1. Blomme, G.; Ocimati, W.; Sivirihauma, C.; Vutseme, L.; Mariamu, B.; Kamira, M.; van Schagen, B.; Ekboir, J.; Ntamwira, J. (2017) A control package revolving around the removal of single diseased banana stems is effective for the restoration of Xanthomonas wilt infected fields. European Journal of Plant Pathology. Online first paper (15MAR17). ISSN: 0929-1873
2. Rubin, Deborah. 2016. Qualitative methods for gender research in agricultural development. IFPRI Discussion Paper 1535. Washington, D.C.: International Food Policy Research Institute (IFPRI). <http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/130349>
3. Doss, C. (2011). Intra-household Bargening and Resource Allocation in developing countries in World Development report, 2012. Gender equality and development
4. Spielman D.J. (2005) Innovation Systems Perspectives on Developing-Country Agriculture: A Critical Review, International Food Policy Research Institute (IFPRI), Washington, D.C.

ACKNOWLEDGEMENT

This research is made possible thanks to the technical and financial support from GREAT and USAID/FFP

