



# Inclusive Budgeting and Financing for Climate Change in Africa (IBFCCA)



## Gender and Climate Change in Program Design and Appraisal Suggested Guidelines for Session 3 Breakaway Working Groups

We suggest that the breakaway sessions explore the method piloted in Benin by applying it to a typical climate and gender programme. Please feel free to replace this suggested trial programme with one of your own, if you would prefer. The work involves three phases ...

1. Identify the various benefits generated by the programme. We have pre-filled the form with some and you may wish to add more. Provide an expert opinion of the relative importance of each benefits using a score of 1 to 4. (Try not to score everything 4!)
2. Climate change often creates loss and damage that reduces incomes. And women involved in the sector are often disadvantaged. We need to understand how this happens and how important it is, but we are not scoring the vulnerability/inequality.
3. We are scoring whether the various benefits (rows) become more or less valuable to the beneficiaries when climate change and gender are taken into account. In other words, will the programme reduce the impact of climate change and improve gender equality. This is what we score with F/H/M/L in columns 4 and 6<sup>1</sup>.

The hypothetical programme suggested for this exercise supports conservation agriculture (CA). *The Ministry of Agriculture wishes to use GCCIA to show the extra value of benefits, and public revenue, when climate and gender are taken into account.* The programme provides \$10m for: a) adaptive research and extension to farmers - \$3m; b) farmer networks for exchange of experience - \$1m; c) technical and financial support to suppliers of inputs and the direct planting equipment required for CA - \$4m; and d) technical and financial support to enterprises owned and run by women that provide new crop marketing options - \$2m. An economic appraisal has been done without considering climate or gender and suggests increased yields would deliver annual benefits of \$1m and increased annual government revenue of £0.2m. How does climate change and gender affect this?

Routine Development Benefits. The programme provides routine development benefits arising from improved soil organic matter. This leads to higher soil moisture which increases yields in years of normal rainfall and protects yields during dry spells. It also expands the options of crops that can be grown. The growing season is extended leading to the possibility to two crops per year. There is also an increase in soil nutrients which reduces the need for chemical fertiliser. Some increase is needed in herbicides during the early years, but this becomes small over 3 to 5. Labour on weeding is reduced. There are also costs, including new equipment for direct planting, the inability to use crop residues as fodder and the need for occasional pesticide use. With current climate conditions, the benefits are estimated to be double the costs.

Climate Adaptation Benefits. Climate change will result in an increase in the unreliability of rainfall and the frequency of droughts. With conventional agriculture, this reduces average farm incomes by 40% by 2050. ***The increased protection provided by improved soil moisture retention means that half of these losses will be avoided for those farmers that switch to CA.***

<sup>1</sup> The scores are converted into %s, which are used to estimate the increase in each benefit, as indicated in the table footnote. There is a logic behind the choice of %s: for climate change this is related to the increased benefits as rainfall unreliability gradually doubles by 2050. The same %s are used for gender for simplicity.

Gender Benefits. In conventional agriculture, women typically do the majority of the fieldwork and men are responsible for all crop marketing. The support for women's marketing aims to put 20% of crop marketing in the hands of women. ***The programme requires less weeding, once CA is established, and operation of the CA equipment is managed by men, releasing women from a large unpaid labour obligation. The women's enterprises allow women to control some of the income from crop marketing.***

### Typical Conservation Agriculture Programme GCCIA Sheet

Component Benefit	Relative Importance	How does the benefit become more important with CC?	Increase in benefit	How does the programme reduce gender inequality?	Improved gender equality	Added benefits <sup>1</sup>
	1 - 4		F/H/M/L		F/H/M/L	
Yields on traditional crops increased and made more reliable	4	Losses from rainfall irregularity and drought reduced from 40% to 30%	H 30%=1.2	The women's marketing initiative means women will control 20% of crop sales	M 20%=0.8	2.0
Opportunities for new crops leading to wider diversity of income sources						
Reduced use of fertilisers reduces water pollution and improves soil quality						
Labour savings create new income generating opportunities						
Higher soil organic matter and reduced agrochem improves biodiversity						
Increased soil organic matter contributes to carbon sequestration						
Soil water retention slows runoff and reduces risks of flooding downstream						
.....						
<b>Total</b>	<b>A:</b>		<b>C:</b>		<b>D:</b>	<b>B:</b>

Notes. For column 2, 1 is low and 4 is high. For columns 4 and 6, F=full, H=high, M=mid, L=low. These are converted into %: F= 100%, H=30%, M=20%, L=10%. Multiplying the relative importance score (ie 1-4) by the % gives the increase in benefit when climate or gender are considered. Adding the rows gives the total increase in climate or gender benefits, which can be divided by A to give an estimate of the % increase in benefits for the programme as a whole.

Column 7 adds the increase in benefits for climate and gender and gives total increase in each benefit, which can then also be added for the whole programme.