Climate Change Adaptation in Agriculture Project Implementation Manual for the Capacity Development Plan

Ministry of Agriculture, Liberia

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# 1: Introduction

- 1.1 The purpose of this manual is to guide the Ministry of Agriculture in Liberia through the implementation of a capacity development plan for climate change. This plan is set out in an accompanying document, as is the capacity needs assessment that informed the plan.
- 1.2 It forms part of the **Climate Change Adaptation in Agriculture** (CCAAP) project. This four-year project started in 2012 and is funded by the Global Environment Facility of The World Bank and the Government of Liberia. The first component of the project is to develop capacity within the sector, so that it is better able to manage climate change.
- 1.3 Capacity development is targeted particularly at those making policies and investment plans for agriculture; the technical staff in the Ministry of Agriculture and in other government or non-government organizations. It is also directed at Liberian research and education institutions so that they can contribute research and train agricultural students in climate change adaptation.
- 1.4 The Implementation plan is the last of three documents from the preparatory stages of this project: A needs assessment was followed by a Capacity Development Plan that provides a detailed description of aims, outputs and activities. The Implementation Manual is a shorter document that gives a step-by-step guide to how the delivery of all this should be managed.

1.5 In the implementation plan, the activities are re-arranged as a series of steps, in the order that they are to be implemented. Some additional steps are added; at the beginning to deal with the necessary preparation and at the end to cover measuring and management aspects. The steps are are broken down into tasks. Roles are defined and guidance on resources (sources and tools) is given. The Implementation Plan also includes a timetable and detailed budget breakdown.

#### Figure 1. The family of capacity development documents



## Step 1: Commission a technical support facility

#### Rationale

Implementation of the Capacity Development Plan requires technical expertise and high-level coordination and influencing skills. The Ministry of Agriculture currently lacks sufficient capacity in this respect. External technical support will therefore be brought in to provide this expertise and to transfer skills and knowledge so that the MoA is self-sufficient by the end of the project (2016).

| Activity  | Roles   | Resources  | Timing    |
|---|---|--|-----------|
| Commissioning an external provider of technical support.  | Overseen by Steering Group/PMU.<br>Procurement implemented by Project | MoA and UNDP procurement guidance  | Immediate |
| Tasksa. Prepare terms of reference for<br>technical support facility (TSF)  | Coordinator   | Specification for technical support<br>facility provided in capacity<br>development plan |           |
| b. Procure provider   |   |  |           |
| c. Identify MoA staff 'focal points'<br>from key divisions to work<br>alongside CCAAP and technical<br>support facility |   |  |           |

## Step 2: Develop teaching curriculum on agricultural adaptation

#### Rationale

The present curriculum of the Universities and other teaching establishments in Liberia do not include climate change adaptation. Support is therefore given for the two Universities in Liberia to develop modules on this topic, for their own teaching and for use by other teaching institutions. To ensure that training is closely linked to the realities of farming, students will be supported with a program of field studies in the pilot counties.

| Activity   | Roles   | Resources | Timing  |
|--|---|-----------|---|
| Develop teaching modules on climate change adaptation and<br>include in courses for agricultural students (Activity 3.2)<br>Engage staff and students in field research and work-based<br>learning, supporting the Farmer's Field Schools in the pilot sites<br>(Activity 3.3) | Universities to develop<br>proposals for curriculum<br>development.<br>PC to manage support for<br>teaching development |           | Immediate support to<br>develop curriculum and<br>introduce new courses.<br>Field-studies to be<br>developed after one year<br>of experience in the |
| <ul> <li>Tasks</li> <li>a. Support Universities to review and develop teaching courses on adaptation.</li> <li>b. Develop a program of farm-based training in the pilot sites for students.</li> </ul>   | TSF to play consultative<br>role on curriculum, etc.<br>providing technical<br>expertise as required.                   |           | Farmer Feld Schools   |
| <ul><li>c. Produce teaching modules and materials to be used by other teaching establishments and provide teacher-training.</li><li>d. Create an intern program for positions supporting adaptation work in the pilot counties.</li></ul>                                      |   |           |   |

## Step 3: Prepare and implement a training program for extension workers

#### Rationale

The extension service is the MoA's principal means of engaging with farmers. Staff currently have little or no knowledge or skills in adaptation. The training is based on the learning from the pilot counties, to ensure that it is relevant to farmers' issues/needs. The production of country adaptation plans gives a focus to the training and a valuable output.

| Activity  | Roles  | Resources                      | Timing  |
|---|--|--------------------------------|---|
| Prepare and implement a training program for extension workers, based on  | MoA employs DAOs   | Farmer Field School            | Employment of   |
| the lessons emerging from Farmers Field Schools in the pilot sites and the preparation of county adaptation plans. (Activity 1.1) | Technical Support Facility (TSF) develops training             | Curriculum<br>International    | DAOs is immediate.<br>Training to proceed                       |
| Tasks   | courses, in collaboration with                                 | experience and good            | as soon as TSF is in  |
| a. Employ 4 District Agricultural Officers for pilot counties   | FAO.   | practice in climate            | place.  |
| <ul> <li>b. Adapt curriculum from Farmer Field Schools in pilot counties into<br/>training topics</li> </ul>                      | TSF provides training,<br>including 'training of<br>'trainers' | change adaptation<br>(via TSF) | Training proceeds<br>from pilot sites to<br>county, to national |
| c. Train extension staff in pilot counties (30 staff)   | PC oversees implementation                                     |                                | level.  |
| d. Review effectiveness of training in pilot county (internal review)   | and participates in all  |                                |   |
| e. Develop and deliver national training course based on experience from pilot counties   | activities<br>Ministry of Gender leads                         |                                |   |
| f. Training of trainers from amongst MoA staff  | training through the Women's<br>Rural Network                  |                                |   |
| g. Develop and deliver a separate training course for women farmers and leaders   | Steering Group (SG) oversees<br>implementation and review of   |                                |   |
| h. Implement national training (all extension staff)  | effectiveness.   |                                |   |
| i. Train and support MoA County/District staff to prepare County<br>Adaptation Plans for the pilot areas.                         |  |                                |   |

## Step 4: Establish climate resource centers in the pilot counties

#### Rationale

Extension workers and partners working with farming communities do not have access to quality information on climate risks and adaptation. This would be addressed by providing an information center in each of the pilot counties.

| Activity  | Roles   | Resources  | Timing  |
|---|---|--|---|
| <ul> <li>Establish climate resource centers in the pilot counties to make meteorological information and climate change adaptation information available to extension service and partners (Activity 2.1)</li> <li><b>Tasks</b> <ul> <li>a. Secure space and management/monitoring arrangements in County Agricultural Offices.</li> <li>b. Establish system for monitoring quantity and quality of use and include within CCAAP monitoring.</li> <li>c. Procure equipment (Desktop computer, table, chairs)</li> <li>d. Implement and monitor, updating content at least monthly using resources, plans etc. from Farmer Field Schools in pilot sites, County and national adaptation activities.</li> <li>e. Review use and success of resource centers after 2 years.</li> </ul> </li> </ul> | PC to implement set-up and<br>procurement, working with<br>County Agric. Officers.<br>Agric student intern in<br>County Office to be<br>responsible for upkeep and<br>monitoring.<br>M&E Officer & PC to<br>oversee monitoring and<br>regularly update content. | Equipment to be<br>procured.<br>Content from<br>outputs and<br>information<br>generated by<br>capacity<br>development plan<br>activities | Immediate.<br>Content to be<br>updated monthly. |

## Step 5: Develop a national research program on agriculture adaptation

#### Rationale

There is a lack of information about climate change, risks and adaptations in agriculture in Liberia. Research is therefore crucial to provide evidence for actions and for influencing policy.

| Activity  | Roles   | Resources  | Timing   |
|---|---|--|--|
| Develop a national program of research on agricultural adaptation (Activity 3.1)  | PC to support/commission initial research project with UL & CU.   | Research priorities identified in capacity development plan  | Research fund to be<br>established immediately   |
| <ul> <li>Tasks</li> <li>a. Develop capacity in University of Liberia and<br/>Cuttington University by funding an initial<br/>research program (started in year 1)</li> <li>b. Commission further research to fill knowledge-<br/>gaps identified during implementation of the<br/>capacity development plan.</li> </ul> | TSF to manage wider research fund<br>and commission research.<br>SG to oversee research program<br>and implementation of research<br>contracts. | Numerous donor-led institutions,<br>NGOs and academic institutions<br>provide information on research<br>methods and results relevant to<br>Liberia. | on appointment of TSF.<br>Initial research program<br>with Liberian Universities<br>to start in year 1 (already<br>under development).<br>Research program<br>continues throughout the<br>program so that<br>knowledge gaps identified<br>through, for example, the<br>preparation of a national<br>adaptation strategy can be<br>addressed. |

## Step 6: Form and train working groups on adaptation and disaster risk management

#### Rationale

Liberia is a signatory to the UNFCCC, which guides a supports national adaptation planning. A similar international framework exists for Disaster Risk Management. There is not an agriculture adaptation component within these frameworks in Liberia at present, despite it being the most important sector in terms of climate change impacts. Working groups for planning and ongoing management are therefore introduced in this plan. Technical staff and those at ministerial level are helped to become more familiar and involved with these frameworks, through experience and training.

| Activity  | Roles   | Resources  | Timing                          |
|---|---|--|---------------------------------|
| Embed agricultural resilience into national frameworks for climate change<br>and disaster risk management (Activity 2.4)<br>Familiarize through training and exposure to international knowledge a core<br>team of MoA staff in international-national frameworks important for<br>agriculture adaptation, including UNFCC, DRM, and Meteorology (Activity<br>1.3)  | SG and PC to endorse and<br>manage new role as UNFCC<br>group.<br>EPA to lead training for<br>UNFCC group.  | UNFCC Guidelines.<br>FAO methods &<br>expertise on DRM<br>planning | Following<br>appointment of TSF |
| <ul> <li>Tasks <ul> <li>a. Form an Agriculture Adaptation Working Group within the UNFCCC, adapting the project steering group so it serves this purpose.</li> <li>b. Form an Agriculture Disaster Risk Management group.</li> <li>c. Provide introductory 2-3 day training courses in UNFCC, DRM and meteorology to group members.</li> <li>d. Organize visits by Ministers and Heads of key Divisions to pilot sites to view progress, and to Uganda to see a positive example of national leadership.</li> </ul></li></ul> | <ul><li>Ministry of Internal Affairs to<br/>lead set up and training of<br/>DRM group.</li><li>PC to provide secretariat<br/>support, with expert inputs<br/>from EPA, MIA, TSF.</li><li>Department of Transport and<br/>Land Mines &amp; Energy to<br/>design and provide training in<br/>metereology.</li></ul> |  |                                 |

## Step 7: Train and support staff to produce sub-sector adaptation plans

#### Rationale

The impacts and adaptation requirements of climate change will vary between sub-sectors. There has not been any analysis or planning for climate change in any of the MoAs divisions. The production of sub sector action plans for Crops, Livestock, Land&Water and Fisheries will fill this knowledge gap, provide 'hands-on' training for technical staff and result in a valuable set of plans for managing climate change.

| Activity   | Roles  | Resources   | Timing   |
|--|--|---|--|
| <ul> <li>Train and support staff in relevant divisions to carry out an assessment of climate change risks and adaptation requirements in agricultural subsectors (crops, livestock, fisheries etc.) (Activity 1.2)</li> <li>Tasks <ul> <li>a. Design template for adaptation plans and process for training and production</li> <li>b. Form teams of MoA staff for training and production of plan</li> <li>c. Provide initial training in risk assessment and adaptation</li> <li>d. Facilitation and provide technical support for adaptation planning, including risk assessment, assessment of existing adaptation/coping strategies, options appraisal, action planning and performance measurement.</li> </ul> </li> <li>e. Work with concession-holders to organize a conference on climate risks and adaptation options within the rubber and oil palm industries, leading to an industry led adaptation plan for the sub-sector.</li> </ul> | TSF & PC to design and<br>provide training and planning<br>process.<br>MoA Division heads to lead<br>teams<br>Selected staff from Policy &<br>Planning, Statistics,<br>Information Management,<br>Quarantine, Extension<br>Services and Community<br>Empowerment Division to<br>join teams.<br>PC with TSF support to<br>organize and deliver<br>rubber/palm oil initiative. | Various<br>international sources<br>of risk assessment<br>and adaptation<br>planning (including<br>Care international,<br>UNDP, UNFCCC-<br>ALM). To be<br>sourced and<br>provided by TSF. | Preparation as soon as<br>TSF is in place.<br>Initial training in risk<br>assessment and<br>adaptation<br>immediately.<br>Adaptation planning<br>process to follow start<br>of country adaptation<br>plans, so that<br>learning/tools/templates<br>can be re-used. |

## **Step 8: Make policies and programs climate smart**

#### Rationale

Policies and programs affecting agriculture are currently devised without consideration of whether they will affect objectives for managing climate change. As a result, it is thought that some initiatives will make the sector more vulnerable to climate change and weather extremes. The Environmental Protection Agency is responsible for conducting Environmental Impact Assessments and with some adjustment and support this method could be applied for climate change screening.

| Activity  | Roles  | Resources  | Timing  |
|---|--|--|---|
| Work with Environmental Protection Agency to apply EIA and Strategic<br>Environmental Assessment systems as appraisal tools for making programs<br>and policies 'climate smart' (Activity 2.2)  | EPA to be invited to set up<br>and co-chair group with<br>MoA.   | Task & membership<br>guide in capacity<br>development plan.                                | To precede the<br>development of a<br>national strategy,  |
| <ul> <li>Tasks</li> <li>a. Form a small team of EPA and MoA staff.</li> <li>b. Review and adapt EIA/SEA tools to be suitable for screening climate change risks.</li> <li>c. Conduct a review of existing policies and programs to assess the extent to which they are 'climate smart' and to identify opportunities to amend maladaptive initiatives, starting with MoAs own policies/programs then expanding to other relevant sectors.</li> <li>d. Meet bi-monthly to review new policies and programs</li> <li>e. Report findings to AAWG, Agriculture Coordination Committee and Donors Agriculture Coordination Group.</li> <li>f. Work with other agencies to address any maladaptive policies/programs</li> </ul> | MOA.<br>PC to provide secretariat to<br>group.<br>TSF to provide guidance and<br>support on climate change<br>screening.<br>SG to oversee process and<br>review it after one year. | development plan.<br>Various international<br>climate change<br>screening<br>methodologies | hational strategy,<br>because the review<br>of existing policies<br>and programs will<br>inform the strategy. |
| identified.<br>g. Review the effectiveness of the approach after one year.  |  |  |   |

## Step 9: Prepare a national climate change adaptation strategy for the agricultural sector

#### Rationale

Liberia has a short national policy statement on adaptation in agriculture but not a strategy that sets out the Government's approach and intended actions. This is needed so that decision makers have a policy context to work in and a clear mandate for taking adaptation actions. It is also valuable as an expression of the Government's commitment to managing climate change and as a platform for raising awareness.

| Activity Prepare a climate change adaptation strategy   | Roles  | Resources   | Timing   |
|---|--|---|--|
| and action plan for the MoA and the agriculture<br>sector (Activity 1.4)  | TSF to design and support<br>training and strategy-<br>development process   | International tools for screening<br>policies/programs for their climate change<br>impact:  | Team formed<br>immediately so they<br>can participate in   |
| <ul> <li>Tasks</li> <li>a. Form team of MoA staff to conduct analysis and prepare strategy (supported by TSF)</li> <li>b. Design a process for producing a strategy and support the implementation of this by MoA staff, building on the methods and analysis established through the county and sub-sector plans.</li> <li>c. Prepare and run a consultation and communications initiative to develop and publicize the strategy.</li> </ul> | <ul> <li>development process.</li> <li>Project Steering Group (SG) to oversee production of strategy.</li> <li>Team of MoA staff to prepare strategy, supported and facilitated by TSF and PC.</li> <li>Agricultural coordination committee and donor's agricultural coordination group to provide advisory/consultation.</li> </ul> | <ul> <li>impact:</li> <li>OECD Guidance for integrating CC</li> <li>UNDP Framework &amp; tools for integrating climate change</li> <li>DfID/IDS ORCHID screening tool</li> <li>USAID Mainstreaming adaptation into development planning</li> <li>Care International: Climate vulnerability and adaptation planning.</li> <li>FAO <i>Climate Smart Agriculture</i> publication.</li> </ul> | can participate in<br>and learn from the<br>Following the start<br>county and sub-<br>sector adaptation<br>exercises so that the<br>national exercise can<br>build on the<br>information and<br>experience<br>accumulated.<br>Following the<br>review of policies<br>and programs. |

# 5: Mainstreaming adaptation into agriculture policies and activities

### Step 10: Establish an Agricultural Resilience Unit

#### Rationale

To manage climate change effectively, the MoA needs to mainstream it into its structure and functions. The CCAAP team and the Technical Support Facility provide a starting point and a short term-solution but the ongoing role cannot be played by a separate project unit or an external contractor. The CCAAP team and TSF will therefore be organized to resemble (and pilot) the structure that is required – a core team of experts supported by a larger 'virtual team' of MoA staff who have gained the necessary knowledge and skills.

| Activity   | Roles   | Resources   | Timing  |
|--|---|---|---|
| <ul> <li>Establish an Agriculture Resilience Unit in the Ministry of<br/>Agriculture to manage implementation and coordination of<br/>climate change adaptation (Activity 2.3)</li> <li><b>Tasks</b> <ul> <li>a. Invite MoA Ministers to agree the creation of a new<br/>Agricultural Resilience Unit.</li> </ul> </li> <li>b. Formalise the joint working between the CCAAP project<br/>team, the Technical Support Facility to create a single unit.</li> <li>c. Increasingly involve a wider team of MoA staff – climate<br/>change 'focal points' from the ten key divisions – as their<br/>knowledge and skills are developed through implementation<br/>of the capacity team.</li> <li>d. Establish County Adaptation Teams in pilot counties.</li> <li>e. Secure funding for extending the work of the ARU after the<br/>end of the CCAAP project.</li> </ul> | SG to oversee<br>development of ARU.<br>MoA ministers to be<br>invited to endorse new<br>unit.<br>TSF to manage increasing<br>transfer of<br>skills/responsibility to<br>CCAP team and MoA<br>staff.<br>County & district staff<br>form county adaptation<br>teams.<br>Secretariat provided by<br>DAO appointed through<br>CCAP project | Terms of reference for<br>the ARU in the<br>Capacity<br>Development Plan. | The elements for the ARU are in<br>place from the beginning but<br>they are formalized by midway<br>through the period of<br>implementation of the capacity<br>development plan (2013-2016).<br>Similarly, the County<br>Adaptation Teams occur mid-<br>way through implementation<br>and are a way of formalizing the<br>growing amount of planning and<br>adaptation work that has<br>occurred through<br>implementation of the capacity<br>development plan. |

## Step 11: Integrating adaptation activities into MoA workplans

#### Rationale

Many MoA staff will be actively participating in the implementation of the capacity development plan. The intention is that managing climate change adaptation becomes part of their regular job. To that end, the activities need to be integrated into individual workplans and the corporate planning of the MoA as a whole.

| Activity   | Roles   | Resources                             | Timing   |
|--|---|---------------------------------------|--|
| Integrate adaptation activities into MoA workplans and targets. Tasks  | Policy and Planning<br>Division to lead on the<br>integration of adaptation<br>activities into the<br>corporate workplan and<br>targets.              | MoA corporate<br>workplanning process | In final two years of project,<br>when the extent of the activities<br>and the individuals involved has<br>become clear. |
| a. Work with the corporate planning process in MoA to integrate adaptation activities and objectives.  |   |                                       |  |
| <ul> <li>b. Conduct a business planning workshop with Heads of the<br/>Divisions involved in adaptation activities and all staff<br/>involved, so incorporate adaptation activities into division and<br/>individual workplans.</li> </ul> | Heads of the 20 or so<br>Divisions most involved in<br>managing climate change<br>to incorporate this activity<br>into Division<br>workplans/targets. |                                       |  |

6.1 [Timetable to be added after approach and activities in draft capacity development plan have been agreed/finalised]

#### Timing the set-up of the Agricultural Resilience Unit

6.2 There are arguments for setting up the ARU at the beginning of the project rather than waiting until midway as proposed; mainly that it helps to establish the idea that managing climate change is part of the core business of MoA. However, the recommendation to delay the set up the ARU is made because it adds further complications to the front-end of the project, which is already challenging. In any case, the elements of the ARU are put in place from the beginning; the combination of the CCAAP team and technical support facility and the increasing involvement of trained MoA staff. The difference is that these are given time to evolve, as skills and knowledge is transferred, into a coherent team that can then be formally recognised as an Agricultural Resilience Unit.

7.1 [Table of targets and outputs to be completed after comments and revisions to draft capacity development plan]