REPORT OF WORKING GROUP 4

Climate change and dryland forest

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Group's Objective

To derive realistic priorities for Research and Development for the period 2003 to 2008 (including acquiring knowledge from elsewhere), for addressing modelling and prediction of climate change in dryland Africa.

Over arching recommendations

1. Recognising that poverty and environmental degradation are major problems in dryland Africa and that forests and woodlands contribute to rural livelihoods, we recommend these issues be given priority, while undertaking studies on climate change.

2. Recognising the need to genuinely integrate stakeholders at all levels we recommend that all groups are actively represented in research project steering committees at the national level and that international donors take an active role in promoting such partnerships.

3. Recognising the multifunctional nature of land management in dryland regions of Africa, there is a need to study social, economic and environmental issues simultaneously. We recommend that national and regional organisations define specific areas for intensive investigation and that international donors actively support collaborative projects and dissemination of results through regional networks.

4. Recognising the necessity to understand global change we need global data on climate forcing gas emissions. We recommend international enabling policy on research funding at the regional level which does not exclude any country.

Research recommendations

The following points are the most pressing knowledge gaps:

1. Recognising that the vegetation systems in SSA are threatened by consequences of anthropogenic emissions of climate forcing gases, we recommend that the existing systems are urgently characterised in terms of an Integrated Ecological Management Approach (IEMA).

2. Recognizing that African nations are currently disadvantaged at global climate change policy meetings by insufficient human resource capacity and inadequate national data (net climate forcing gas emissions and all the associated data). We

recommend that research programmes are initiated through national and international institutions using research funds mainly from international donors, in a range of land management uses and vegetation types. In addition, there should be training of researchers.

3. Recognising that existing models are not reliable in predicting climate and vegetation change in dryland Africa, we recommend that research should be carried out to improve the models.