Executive Summary for GEO:
GOFC-GOLD Workshop on
Requirements for an Early Warning System for Wildland Fire in Africa
Nov. 14-16, 2007 Accra, Ghana

The purpose of the workshop was to define the local criteria needed to complete the design of an operational prototype early warning system for wildland fire (Fire-EWS) in Africa. This included identifying decision-support tools specific to fire management activities of African countries, and system data requirements. To reach that end, the workshop proceeded through 3 progressive phases (or components): describing the African fire environment, summarizing fire management policy and programs in Africa, and defining the Fire-EWS outputs needed to support African fire management decision-making. Each workshop component started with several presentations on the topic, which were followed by group discussions (breakout and/or plenary). After completing the final component, the workshop delegates met in plenary to discuss the workshop results and the next steps needed to develop the Fire-EWS for Africa. Following is a list of recommendations by the workshop delegates.

1. There is a need to establish regional algorithms for fire danger rating and remote sensing products for West Africa. This should be done as an initial project under the newly formed West Africa Regional Network (WARN) and will be submitted to the WARN secretariat as a proposed activity.

2. Development of the prototype Fire-EWS for Africa will continue based on the workshop results. The system will be comprised of 3 components: a fire danger rating system, a fire risk assessment, and a fuels assessment. The prototype will operate at the sub-Saharan Africa, and West Africa regional levels.

3. The Canadian Forest Service (CFS) will continue to design the prototype Fire-EWS for Africa. The next step is to complete an operational coarse resolution fire danger rating system (FDRS) for Africa. Similar to the Eurasian FDRS prototype, the Africa FDRS will be operationally run by the Northern Forestry Centre of CFS and posted on the Global Fire Monitoring Centre website.

4. It was proposed to the WARN secretariat to conduct a fire risk assessment for West Africa, as part of the Fire-EWS for West Africa. The WARN secretariat will discuss this proposed activity.

5. It was also proposed that WARN conduct a fuels assessment for West Africa, as part of the Fire-EWS for West Africa. The WARN secretariat will discuss this proposed activity.

6. The prototype Fire-EWS will utilize existing fire management decision-aids from South Africa for fire suppression and prescribed burning. Because grass is the fuel type of greatest concern in Africa (including grassland, savannah, and mixed shrub-grasslands), the Fire-EWS will be run with 3 existing fire danger indices applicable to cured grass: the Fine Fuel
Moisture Code (FFMC) of the Canadian Forest Fire Weather Index (FWI) System, the Lowveld Fire Danger Index (FDI) used in several countries of Southern Africa, and the Grassland Fire Danger Index (GFDI) used in Australia. Classification categories (ie, low, moderate, high, extreme) for the 3 fire danger indices will follow those used by the Lowveld FDI. This will allow initial testing and comparison of the fire danger indices.

7. After the operational Fire-EWS prototype is completed, a review of the current decision-support tools, and potential decision-support tools supporting other fire management activities (ie, prevention, detection, pre-suppression planning) will be done.

8. Funding to develop and eventually operationally run the Fire-EWS for Africa is still an issue. Further funding support will continue to be sought.

9. WARN needs to find a facility to eventually host the operational regional system, but a university association with WARN may be the best option. AFRIFIRENET indicated it would consider hosting the sub-Saharan Fire-EWS, depending on requirements and funding.

10. There is a need to develop a communications plan so early warning information gets to the local community level. Several options were discussed, including GEO netcast. Internet service is not reliable or accessible across Africa, but it is improving.

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