

Global Irrigated Area Mapping (GIAM)

The Global Irrigation Area Map (GIAM), in its path-finding work, captures the extent of irrigated areas – official, private, informal. It is a joint work of IWMI's remote sensing and GIS (RS\GIS) unit team and numerous partners. It is based on a wide range of time-series satellite imagery and groundtruth data. The GIAM web portal (<http://www.iwmigiam.org>) provides: (a) country-by-country irrigated area statistics for all countries, (b) web map, (c) GIAM on Google, and (d) images, maps, and data. The GIAM work is done at 1 to 10 kilometer pixel resolution (reported at 10 km), but also consists of irrigated area maps for the Indian sub-continent (7 countries) at 500 m and for 3 river basins at 30 meters.

GIAM is well-investigated work that will help you to get irrigated area of the Countries, their spatial distribution, and related maps. There are clearly still some debates and uncertainties on the results and this calls for a strengthened cooperation with national statistical bodies, as well as international partners like FAO to further refine such a map. Since GIAM work does consider informal (e.g., groundwater, small tanks, small reservoirs) irrigation as well, there are likely differences with maps and statistics that are based on official figures alone. A first step in that direction of refinement and synthesis amongst different approaches or reporting systems was taken at the recent workshop (25-27 September 2006), The International Workshop on Global Irrigated Area Mapping (GIAM), hosted by IWMI, Colombo, Sri Lanka. During this period, an informal group of researchers and institutions came together to form a Consortium for Irrigated Area Mapping and Assessment (CIAMA) that includes IWMI, NASA, USGS, leading Universities (e.g., University of North Dakota, Yale University), and various National partners (e.g., China, India, Sri Lanka, Pakistan). The map is available for feedback, comments and improvement at <http://www.iwmigiam.org>. The approach and methodology are described in the recently published research report published in the IWMI research report No.105. For further questions, please contact: Prasad Thenkabail (p.thenkabail@cgiar.org).