Data, Knowledge & Communication (Flagship 1): This Flagship addresses baseline-data management, foresight planning and priority setting to enable demand-driven R4D focus and impact assessment, and contributes towards productivity, nutrition and income (IDOs 1, 3 and 4). Gender is a cross-cutting activity in this flagship and is integrated into all of its planned outputs. The collection and analyses of baseline data for the target crops as relevant to the target regions has been an ongoing activity during the first phase of the program through one important bilateral project. Assembly of the available data and synthesis of results, together with identification and rectification of existing gaps in base-line information is a top priority for Dryland Cereals during the extension phase. Additionally, information will be collected through GIS to provide up-to-date information on current dryland-cereals geographies and changing recent trends. The GIS data will also be used to predict future dryland-cereals geographies arising due to climate change. The USGS-NASA-based "Global Croplands Project" plans to collaborate with the Lead Center, ICRISAT, and this collaboration will provide the information necessary to map barley, sorghum and millets, using the imagery provided by USGS-NASA. Foresight planning and priority setting efforts will use the assembled baseline data to identify critical areas of focus for research investments, partnerships and interventions in Flagships 2, 3 and 4. The integrated modeling framework developed under Policies, Institutes and Markets (PIM) will be used to analyze various plausible future scenarios to identify those dryland cereals technologies and management systems that will contribute most to the achievement of the IDOs. Adoption surveys and impact assessment will be conducted to monitor the level and pathways of adoption, and to measure the changes in selected outcome and impact indicators. The feedback generated from these surveys will facilitate better targeting of crop-improvement and cropmanagement interventions. A knowledge exchange platform (DrylandCereal.NET) that collates and disseminates knowledge resources including relevant data, information, publications, news and stories related to dryland cereals is envisioned to act as a single point of reference for the crops under Dryland Cereals. Capacity building is an important component of this sub-theme, and will include short-term training courses, long-distance learning of short-term course modules delivered through interactive web-based interfaces, and scholarship programs.