

Tandojam Declaration

Adopted unanimously by the participants of National Conference on Spate Irrigation: Potential and Management, 7th December 2015, Sindh Pakistan.

The National Conference on Spate Irrigation, jointly organized by Sindh Agriculture University Tandojam, Sindh Pakistan and Research and Development Foundation (RDF), held on 7th December 2015 at Agriculture University Tandojam Sindh, the event was attended by more than 300 researchers, practitioners, faculty members and potential farmers, considers and urges that the spate irrigation system should be mainstreamed into operational sectors in order to alleviate poverty from the arid areas, particularly mountainous areas of Pakistan and that the conference affirms that Pakistan has huge potential of spate flows, but this water is not used optimally and as a result it is causing scouring, sedimentation and damages to costly infrastructures, settlements, lands and other properties. This conference raises that the Spate irrigation system is neglected as sector, particularly in Sindh, however its management must be improved as sometime natural streams cause disastrous situations for communities.

Reaffirming that the development of alternate water resources is key to self-sufficiency in the country, to meet growing needs of the food security and other uses, thus spate management facilities, programs and opportunities must be accelerated for the farmers, communities living in spate areas of Pakistan, which are in fact least developed. These areas have large piedmont plains with fertile alluvial soils where sustained irrigation systems can be developed. There is enough potential for the development of new lands around current irrigated fields, once spate irrigation structures are established. Indigenous knowledge and practices are vital aspects of this sector and we need to understand them before planning and addressing the hill torrent and spate irrigation sector.

Having taking into account the importance of spate for academia, students, future development projects, it is affirmed that spate should be included in academics at higher studies in Pakistan. Research avenues for the students may be developed with facilities by the academia and the Government's relevant departments in order to explore various management models as well as to learn from the natural assets and provide recommendations. In this regard, those scientists and organizations that are associated with the spate irrigation system, should provide problem statements and list of practical issues of the spate water to the universities.

The Conference, recognizes the importance of environment, rangelands and surface and groundwater resources of the spate areas, thus it emphasizes that before launching of any Spate Irrigation Development Program, assessment be conducted and spate irrigation projects must have an integrated approach to hill torrents. Under an integrated development approach both upstream (watershed/catchment) and command areas need to be developed at the same time in order to foster sustainable development.

Conference values and commits to ensure that water right and local rules pertaining to spate irrigation system must be protected by all means when organizations work on spate development and rules should be codified where they do not exist. Care must be taken to establish and strengthen local water user association/farmer organizations to supervise and manage these spate flows according to local rights.

The Conference considers its importance to promote low cost solutions like simply diverting water, guiding and spreading it on wider areas for agriculture, rangeland development, storing of spate water for livestock and human consumption and recharging aquifers are preferred over costly solutions like making dams and reservoirs. However community reservoirs and storage facilities must be promoted, protected and improved. The guiding and diverting spate flows through low cost but improved designed structures in these areas would not only help in the development of sustained irrigation system but would also save costly infrastructure from frequent flood damages and at the same time will help recharging aquifer.

Considering, disaster risk of the flash floods, it is inevitable to prepare climate scenarios, provide weather information and have early warning systems and information system in spate irrigated areas in order to avoid huge damages to the public and private properties in spate areas of Pakistan. Since, climate change has affected pattern of the precipitation, thus for the poverty alleviation, off farm livelihood strategies should also be designed and implemented in order to make vulnerable self sufficient.

The conference determines that Spate agriculture areas don't have round the year cropping and that the spate flows are mostly unpredictable, thus urges the Government may design and implement market driven alternative livelihood opportunities for the poverty alleviation in the spate areas of Pakistan.

The National Conference on Spate Irrigation also recommends that the organizations working on spate irrigation and Government departments consider ways and means for the implementations of the recommendations as set out in this declaration.