Another Drought? Are we prepared?

Mohammad Riaz^{1,2} and Lawangin Sheikh²

¹National Centre of Excellence in Geology, University of Peshawar

²University of Swabi, Anbar, District Swabi

mriaz07@yahoo.com

Abstract

In May 1997 the term El Niño suddenly became pandemic and spread across the globe like a jungle fire. This was due to the horrific effects that were brought down on the humanity and their planet earth by the most potent climatic phenomenon of the 20^{th} century.

El Niño develops in response to weak easterly trade winds over the eastern Pacific Ocean forcing warm western Pacific waters to swell and heat up the central and eastern Pacific. La Niña typically follows El Niño, and causes the western Pacific waters to warm up and cooler central and eastern Pacific waters. Together these two phenomena cause weather changes on global scale, particularly in tropical Pacific.

The 1997-98 El Niño brought severe drought in southern Pakistan and the La Niña conditions caused the worst flooding in the history of Pakistan in July-August of 2010.

This year in late February, a bulge in the equatorial Pacific waters off the coast of northeast Australia was noted—a sign of the start of Kelvin wave or simply the beginning of an El Niño. The Kelvin wave has now spread eastward to the central Pacific waters and is heading towards the eastern Pacific. Although, it is not yet certain if the El Niño will develop to its fullest, but if it does then we must be prepared. The definitive confirmation of full development of the El Niño will only be clear by the end of 2014. The fuller extent of El Niño will bring, similar to 1997-98 or even worst, drought conditions in southern Pakistan. The preparation can include contingency planning, rainfall monitoring, water conservation strategies, relocation strategies, water storages, emergency health facilities, live-stock preservation strategies, selection of right crops in the foreseeable drought hit areas of southern Pakistan and federal/provincial government coordination.