Flourishing through the countries of SouthEast Asia, Mekong River plays the strategic role in providng water for Vietnam, Laos and Campuchia. However, mass dam constructions, El Nino and unauthorized aquatic catching has resulted in severe droughts combined with watershed pollution.

According to The Diplomat, to date, “11 dams are planned for the mainstream of the Mekong River and another 123 are in the works for its tributaries. Xayaburi is the biggest by far and widely criticized by fishermen in the delta, where up to 70 million people rely on the Mekong as their chief source of food”. The leadership role in the rice producing industry result in Vietnam’s huge consumption of water for agriculture, with over … gallons of water annually extracted from the Mekong.

Consequences are hard to imagine. As many as 180,000 hectares of farm land has been affected, destroying crops and causing critical shortages of water for delta residents. More than 800 different kinds of aquatic species are on the endangered list and are slowly disappearing everyday. Large number of dams occupy up to 11% of the basis water in the river, which leads to constant droughts and salinization in the dry season. Climate projections estimate that the local sea level could rise by as much as 1 m over the next 100 years, which would [drown more than one third of the Mekong Delta](http://www.mrcmekong.org/mekong-basin/stories-from-the-mekong/living-on-the-edge-of-the-rising-sea/). The threat of sea level rise is profound in the low-lying Delta region, and the population must adapt to the creeping advance of saltwater at its doorstep.

From my own point of view, the sea water purification system from Israel is a model that worths learning for ASEAN countries. Israel begins from the same point as Vietnam and many ASEAN countries: a developing economy which mostly based on agriculture. But as time flies, the country realizes that it needs more sustainable water sources than from rivers. As a result, they have created the world’s first environment-friendly sea water purification system - using RO technology. Over 1,2 million of gallons of sea water are purified everyday, keeping the country far away from water shortages. Vietnam has the ideal location next to the East Sea and huge areas of coast land, so it is not that impossible to replicate the process.