Under the multi annual programme of cooperation with the Government of Pakistan, the EU Delegation is developing a technical assistance intervention named **Revival of Balochistan Water Resources Programme (RBWRP)**. The following is Information Note on RBWRP.

The overall objective of the RBWRP is to contribute to the sustainability of the rural economy in conjunction with reduced water use and improved land management in the arid regions of Balochistan. The Programme will seek to achieve good outcomes for effective water and land management. This will be through interventions in four interlinked and closely associated specific objectives. The four objectives are, (i) to enhance governance of the land and water sector, (ii) to support actions that will lead to a switch from excess water use to a low water agro-economy, (iii) to support a strengthened value chain in a transformed economic framework and, (iv) to support the establishment of vocational training courses dedicated to agro technology. Each of these are further explained below.

Enhanced Governance – sector analysis indicates that there is a need to move out of the silo style management of water resources, rangelands, livestock and agriculture. Significant coordination is now needed to address the intricate and interconnected issues in water management. Experience suggests that such coordination is only possible through an empowered apex body, overseeing all of these sectors. Oversight can only be effective if it is based on scientifically sound evaluation of the water resources, land use, demand vs available resources and a forecast of the future climatic trends. Thus an authoritative province wide master plan would enable an apex body to direct the future trajectory of integrated water related polices from the provincial through to the district & tehsil level.

A switch from excess water use to low water agro-economy has to be the underlying principle for the arid regions of Balochistan, since there are clear trends in the decline of annual rainfall and available water. The primary sector where this switch must take place is irrigated agriculture, in which the net water use has to be scaled down and less water consuming agricultural production should take place. In tandem, a refocus on livestock and rangelands is urgently needed. Rangelands should be at the heart of regenerating the now strongly depleted groundwater reserves. Wise reversion to traditions of livestock based livelihoods would give the impetus for their revegetation and consequently also for enhancing the future infiltration potential. Over a period of time (years), the benefits will multiply. Better quality of livestock, less water consumptive cropping with sustainable livelihoods can be expected over the coming decades. Business-as-Usual can be forecast to have one, and only one, trajectory – decline in all aspects.

Strengthening value chains for the agricultural products would underwrite the future sustainability of the rural livelihoods. The worth of the present output (agricultural, as well as livestock) is severely constrained due to limited access to services, such as market information, pricing and transport, to name just a few. By providing these, and adding additional value chains the shocks from extended droughts, price fluctuations and other external factors would be better absorbed. Since it is clear that farming communities are very risk averse, yet highly responsive to successful innovation, a significant amount of extension services, would be required. These would include access to veterinary support, information on plant and seed varieties, application of fertilisers, timing and scale of irrigation needed, as well as the full range of relevant technologies. An observation to make

here is that such services should preferably be commercialised and not provided by the government in the longer term.

A cadre of trained and effective agro technicians, is sorely absent in the districts and villages to give the much needed support to farming and livestock communities. The agricultural training institutes do produce an annual batch of graduates. However they are absorbed into a bureaucratic system, which is unresponsive to the actual needs of their clients. The syllabi of the training institutions in Balochistan merit a comprehensive re visit and reassessment so that future graduates could be more effectively deployed. There is a gap in the current agro educational system that misses out on providing vocational training. Technicians with vocational skills would be capable of providing the on-the-farm services. There is also a gap in the training of more specialised and more capacitated, but mid level field based technicians, who could provide a link between the suppliers of equipment and materials (such as, efficient irrigation systems, control devices, agro fertilisers), and the consumers of these materials.

The revival of the Balochistan water resources programme has to be fundamentally connected to the **basin approach**, as this is the basic unit of landscape that determines all management options. Once a Provincial water resources master plan, based on a basin-by-basin, in depth analysis (hydrological, land use, socio-economic, etc) has been conducted, the next steps would require the prioritisation of basins where urgent attention is needed to address current demands vs available resources. In the planned EU intervention, up to four sub basin landscape units will be selected to conduct pilot scale activities. Each of the four objectives indicated above will be addressed in these sub basins. The scale and the scope of the pilot scale activities will vary between the basins and will depend on their needs. The needs assessment will require community consultations, as well as science based assessment of the sub basin in question.

As an example of the criteria for the selection of **sub basins where pilot scale, replicable activities** could be conducted, the following may be stated –"high current abstraction, intense irrigated agriculture, clear indications that water resources are seriously stretched, and a forecast that all parts of the water related economy are at serious risk of collapse in the not so distant future". At the other extreme, another example of the criteria would be, "water resources with good potential, irrigated agriculture maturing but not yet intense, indications that accelerated abstraction will cause a resource loss and economic decline, unless actions can be initiated at the outset." Additional criteria, such as the socio cultural drivers and constraints will also be included.

The planned intervention by the EU is expected to have a six year duration. As the first step of the intervention, the governance objectives of the intervention will be addressed in close cooperation with the government of Balochistan. The structure of the apex body, its scope of work and responsibility, including the capability to provide the sectoral oversight will be developed. At the same time the support will be provided to the educational institutes, the initial batch of trainees will be identified and recruited into the college courses. With these activities progressing, the second step, the selection of the sub basins for pilot activities will start up. An in depth appreciation of the sub basin is a fundamental requirement and this would extend from the natural systems (land & water) through to the social relations, the economic outlook and a risk assessment of the likelihood of success should be conducted.

It may be appreciated that such a complex issue of water (multi-sectoral, multi-faceted, multi-disciplinary) cannot be fully resolved for the whole of the province in a short period. The effort to "make the change" and it benefit will take time and will depend on the political will to make some hard decisions.