

Ghulam Muhammad

Chief Conservator of Forest Government of Balochistan Quetta – Pakistan

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CV

- Name: Syed Ghulam Muhammad
- Date of birth: 12-2-1966 (February 12, 1966)

Academic Qualification:

- MS (Forest Resources) 1992-94 College of Forestry, Wildlife, and Range Sciences, University of Idaho, Moscow, Idaho, USA.
- M.Sc. (Forestry) 1987–89 University of Peshawar, Pakistan.
- B.Sc. 1983-85 University of Balochistan, Pakistan.

Work Experience:

- Chief Conservator of Forests (South) Balochistan from January 1, 2013 to date
- Conservator of Forests Research from August, 2011 to date: Responsibilities include preparation of research plans, attending research related meetings, workshops.
- Provincial Coordinator Emergency and Rehabilitation Coordination Unit (ERCU) of Food and Agriculture Organization (FAO) of the United Nations from October, 2010 to July 31, 2011.
- Project Manager, Mainstreaming Biodiversity Conservation into Production System in the Juniper Forest Ecosystem, Ziarat a Global Environmental Facility (GEF) and UNDP funded project, which is implemented by The World Conservation Union (IUCN) from March 5, 2007 to March 4, 2010.
- Ecosystem Specialist, Area Development Programme Balochistan (ADPB), from July 2001 to March, 2006.
- Project Director/Divisional Forest Officer, Range Management Unit, Area Development Programme Balochistan, from May 1999 to June, 2001.
- Divisional Forest Officer, Sibi, from December 1998 to May 1999.
- Project Manager, Conservation and Management of Ziarat Juniper Forests Project, from June, 1997 to June, 1998.
- Languages: Fluently speak and write English, Urdu, Pushtu, Speak Brahvi.

Publications:

1. Herbaceous vegetation control in Ponderosa Pine (*Pinus ponderosa*) plantations in Northern Idaho, USA: Economic and Silvo-pastoral Implications.
2. Balochistan's Ancient Junipers: Bringing Sustainable Management of Dry Zone Forests in Journal of Forestry, April, 1998, pages 34 -37.
3. Juniper dwarf mistletoe, *Arceuthobium oxycedrii* (DC.) M. Bieb, in Balochistan Province Pakistan in the Forestry Chronicles: 74(4):549 – 553.
4. Breaking the Old and Setting the New Paradigm in Forestry Development by the Area Development Programme Balochistan.
5. Water harvesting Presents Great Potential for Increasing Agricultural and Fodder Crop Production

Juniper Forests of Ziarat – A Unique Ecosystem a Strong Candidate for Man and Biosphere Reserve Programme

Ghulam Muhammad, Chief Conservator of Forest Government of Balochistan Quetta – Pakistan

Juniper forests of Ziarat have long been source of attraction both to the elites and general public for recreational purposes. These forests because of longevity of trees growing in them are also known as “Living Fossils”. Juniper forests of Ziarat constitute the second largest tract of *Juniperus excelsa polycarpus* in the world. Juniper tree, which is generically a slow growing tree species, is the dominant tree species in these forests with associated ground flora including *Prunus* spp wild almond, *Caragana* spp, *Berberis* spp, *Ephedra* spp. Due to the slow growing nature of the Juniper,

the trees present in these forests are 1500 to 2500 years old. On the wildlife front, forest provides habitat to Suleiman Markhor, Asiatic wolf, fox, jackal, pika, hedgehog and many other species. Besides, these forests also serve as wintering ground for Black Throated Thrush.

Juniper forests serve as a source for a number of goods and services ranging from timber and fuel wood to ecotourism. Legally these forests enjoy the status of State Forests. However, due to population explosion of human and livestock these forests are faced with natural as well anthropogenic threats leading to the degradation. Among the natural threats, drought, insect and disease attack and climate change. While among the anthropogenic threats, deforestation for fuel wood and timber, change of land use, deforestation for source of income, livestock grazing.

Taking into account the degradation of these forests a number of efforts have been put by Government as well as by NGO sectors. However, in these initiatives the human aspect has remained unattended. For taking care of the human/social aspect, the IUCN Pakistan launched a project that helped local communities to modify the present production systems into biodiversity friendly and simultaneously contributed in increasing the productivity of ecosystem. Recently the Government of Balochistan, as follow up to the IUCN project has also launched a Mega Project for the restoration and improvement of Juniper forests.

Juniper forests because of the longevity of trees present in them and provision of habitat to a number of important wildlife species assume immense importance in the arid climatic conditions of Balochistan. It thus becomes imperative that serious efforts should be put up for conservation of this precious chunk of Junipers. Man And Biosphere (MAB) Reserve programme offers one such opportunity whereby these forests can be brought back on the track of restoration and improvement. MAB will not only help in bringing these forests in limelight at national and regional level, thereby attracting the attention of a huge number of audiences present globally as natural resource managers, scientists, naturalist and conservationist. Juniper forests have got rich biodiversity as well as cultural heritage, and, therefore, stands atop as one of the potential candidates for the MAB Reserve programme of UNESCO.