

CURRICULUM VITAE

ALI HASSAN SHAH

Present Position and Firm: **Chief Agronomist**, Anchor Commodities Pvt. Ltd. Supply & Services Company for World Bank Funded High Efficiency Irrigation Systems Projects in Punjab of Pakistan.

Last Position and Firm: **Soil Scientist** in Project-Implementation Supervision Consultants (PSC) – Initially a Joint Venture of NESPAK & NDC and then a joint venture of NDC & ACE for a World Bank Funded Project “Punjab Irrigated-Agriculture Productivity Improvement Project (PIPIP)” related to High Efficiency Irrigation Systems in the Punjab.

Last UNDP Assignment: **District Manager** Hafizabad, UNDP Project Biosaline-II “Community Development Project for Rehabilitation of Salt Affected and Waterlogged Lands” funded by United Nations Development Programme (UNDP) & Asian Development Bank (ADB)

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Profession: Natural Resource Management and Rural Community Development

Date of Birth & Nationality: 20th August 1948 Pakistani

EDUCATION

- M.Sc.(Hons) Agriculture - Soil Science from the University of Agriculture, Faisalabad, Pakistan in 1971
- M. Phil (Water Resources Management) from the University of Engineering & Technology, Lahore, Pakistan in 1989
- One Year Non-Degree Masters Level Course in Agricultural Soil Physics from the University of Missouri, Columbia, USA in 1988

TRAININGS

INTERNATIONAL

- Two Month Certificate Course in Training and Development from the Thames Valley University, Slough, U.K. in 1997
- Two Week Course on Measurement and Mapping of Soil Salinity Using Electromagnetic Induction Meters from the Alberta Agriculture, Food and Rural Development Crop Diversification Centre, Brooks, Alberta, Canada in 2001
- Two Week Training/Study Visit of Australian Salinity Research Institutes Arranged by Australian Agency for International Development (AusAID) and Commonwealth Scientific and Industrial Research Organization (CSIRO) in 2008
- A Five Day Training Program / Workshop on Water Balance Studies on Agroforestry Under the CSIRO/AusAID Project “Improved Prediction of Agroforestry Productivity and Reclamation Opportunities in Shallow Watertable Salt Affected Landscapes of India and Pakistan” at Punjab Agricultural University, Ludhiana, India in 2010.
- Two Week Training/Study Visit of Indian Agricultural Universities and Research Institutes such as Punjab Agriculture University (PAU) Ludhiana, Haryana Agriculture University (HAU) Hisar, Central Soil Salinity Research Institute (CSSRI) Karnal and Indian Agricultural Research Institute (IARI) New Delhi in 2011

NATIONAL

- Training of Trainers (TOT) in Participatory Training of Farmers by Netherlands Research Assistance Project (NRAP) at Bahawalnagar in 1998.
- Training in Nursery Raising Techniques by Punjab Forestry Research Institute (PFRI) Faisalabad in 1997.
- Rapid Appraisal of Agricultural Knowledge Systems (RAAKS) Training on Human Resources Management in Irrigated Agriculture jointly organized by International Irrigation Management Institute (IIMI)-Pakistan and the Wageningen University, the Netherlands at (IIMI)-Pakistan Lahore in 1995.
- Course on Basic Programming Using Micro Computers from Fourth Drainage Project, WADPA, Lahore in 1986.
- Computer Foundation Course at Institute of New Technologies, Lahore in 1999
- Basic Management Course at Wapda Academy, Tarbela in 1998
- Short Course on Environmental Pollution, Ecological Risks and Sustainable Agriculture at Arid University Rawalpindi in 2000.
- Training Course on Understanding Poverty and Mitigating Measures at Pakistan Academy for rural Development, Peshawar in 2005.
- Training Workshop on Social Mobilization Processes and Techniques by UNDP Project Biosaline-II at Lahore in 2007.
- Training Course on Creative Thinking at the Institute of Social Sciences, Lahore in 2000.
- The Seven Habits of Highly Effective People Training Programme by FranklinCovey South Asia in 2008.
- Course on English Language from USAID Training Centre, Islamabad in 1986.
- Participated in the 4th International Conference on Water Resources and Environments (ICWRE) at Riyadh, Saudi Arabia in 2010.
- Participated in the Symposium on Use of Potassium in Pakistan organized by the Soil Science Society of Pakistan at Serena Hotel, Faisalabad.
- Participated in the Second One Day Capacity Building/Training Workshop organized by Social and Environmental Management Unit (SEMU) at Faisalabad in 2007.
- Participated in the 59th I.E.C Meeting and 90th Congress of ICID held at WAPDA House Lahore in 2008.

KEY QUALIFICATIONS

I am basically an Agricultural Graduate with M.Sc. (Hons) Agriculture - Soil Science and M. Phil (Water Resources Management) Degrees from Pakistan. My international trainings/courses include one-year Non-Degree Master Level Course in Agricultural Soil Physics from the University of Missouri, USA; two months Certificate Course in Training and Development from the Thames Valley University, O.K.; and two week Course on Measurement and Mapping of Soil Salinity Using Electromagnetic Induction Meters from the Alberta Agriculture, Food and Rural Development Crop Diversification Centre, Canada. I have also got study visits to Australia and India. My professional key national trainings relate to natural resource management, community development, social mobilization and capacity building. My professional career comprises more than 50-year experience of agriculture oriented research, extension and planning related to land and water resources management and rural community development. I have served for about 19 years in community based land rehabilitation and high efficiency irrigation projects funded by International Donors such as Australian Agency for International Development (AusAID), United Nations Development Programme (UNDP) and Asian Development Bank (ADB). I have worked as Soil Scientist with Project Implementation Supervision Consultants (PISC) for Punjab Irrigated-Agriculture Productivity Improvement Project (PIPIP) funded by World Bank since 2013 to 2020. At present, I have been working as Chief Agronomist with Anchor Commodities Pvt. Ltd. – an SSC for the said Punjab Irrigated-Agriculture Productivity Improvement Project (PIPIP). I have about 75 technical publications at my credit that include technical papers, reports and extension materials. I have presented papers at national and international forums particularly in Australia, Canada, UK, Oman, Saudi Arabia and India.

PROFESSIONAL SKILLS

TECHNICAL	MANAGEMENT	COMPUTER
Soil Analysis to Assess Fertility and Salinity Status	Management of Project and Multidisciplinary Teams	MS Office (Word, Excel & PowerPoint)
Water Analysis to Assess Irrigational Suitability	Budgeting and Financial Management	Word Perfect, Statistical Analysis System
Fertilizer Research Trials and Demo Plots on Farmer's Field	Project Preparation and Implementation	Use of Internet and E-mail
Formulate Fertilizer Recommendations	Supervision of Project Interventions and Field Activities	Display Project Activities through Computer
Collection of Soil and Agronomic Data	Formation of Community Organizations	
Data Analysis and Report Writing	Strengthen Participatory Approaches for Development	
Soil Survey and Field Investigations	Strong Interest and Commitment to Work with Rural Communities	
Preparation of Feasibility Reports	Administration and Supervision of Project Staff	
Preparation of PC-1 and other Project Documents	Manage Agro-Socio-Economic Baseline and Follow-Up Surveys	
Annual Work Plans and Progress Reports	Coordination between Project Stakeholders	
Training Needs Assessment	Manage Impact Assessment Studies	
Capacity Building of Project Stakeholders	Manage Training Sessions and Workshops	
Design Land Rehabilitation Strategies and Approaches	Audio and Video Productions	
Social / Community Mobilization	Organizational Need Assessment	
Monitoring and Evaluation	Manage Development Publication of Technical Reports/Materials	
Technical Research and Extension Materials	Arrange Farmers' Field Days	
Fluency in Spoken and Written English	Manage Project Stakeholders' Meetings	

LANGUAGES

S. No.	Language	Read	Write	Speak
1	English	Excellent	Excellent	Excellent
2	Urdu	Excellent	Excellent	Excellent
3	Punjabi	Excellent	Excellent	Excellent
4	Persian	Excellent	Excellent	
5	Arabic	Excellent		

PROFESSIONAL CHRONOLOGY

More than 50-year professional experience of agriculture oriented research, extension and planning related to land and water resources management and rural community development.

Timeline	Organization / Institution	Position	Nature of Duty
February 2021 to date	Anchor Commodities Pvt. Ltd. (ACPL) – SSC for Punjab Irrigated-Agriculture Productivity Improvement Project (PIPIP) funded by World Bank for High Efficiency Irrigation Systems (HEISs)	Chief Agronomist	<ul style="list-style-type: none"> • Provide Follow Up Technical and Agronomic Services to Project Farmers. • Give input at the time of installation of high efficiency irrigation systems and guide the stakeholder about agronomic and soil related issues such as soil fertility / productivity issues • Impart training to SSC staff as well as other Project Staff for the purpose of Capacity Building of stakeholders for smooth running of the project
March 2013 to January 2020	Project-Implementation Supervision Consultants (PSC) - A Joint Venture of NESPAK and NDC and then after 8 months interval A Joint Venture of NDC and ACE for "Punjab Irrigated-Agriculture Productivity Improvement Project (PIPIP) for High Efficiency Irrigation Systems (HEISs)	Soil Scientist	<ul style="list-style-type: none"> • Assist the project management in implementation of project activities related to soil management particularly under high efficiency irrigation system • Provide technical support and guidance to project staff and beneficiary farmers regarding soil fertility / productivity issues • Prepare training curriculum and lesson plans for training programs for capacity building of staff and farmers in fertility management under high efficiency irrigation management systems • Impart training to technical staff in processing soils and water quality data for nutrient management through fertigation • Build capacity of field staff / farmers in nutrient management for different soils under modernized irrigation techniques • Produce guideline manuals for the project staff and Urdu pamphlets for the farmers. • Provide technical assistance to field staff for backup support to farmers in soil and fertility management under high efficiency irrigation systems • Provide necessary advisory backup services to the farmers for smooth running of the high

			<p>efficiency irrigation systems</p> <ul style="list-style-type: none"> • Conduct field visits to provide necessary technical services to the farmers at sites as well as provide written field reports to the farmers of PIPIP. • Diagnostic and Follow Up Survey of High Efficiency Irrigation Systems (HEISs) to assess the status of irrigation system working and also provide technical assistance to the beneficiary farmers. • Prepare fertigation schedules for different crops being grown through high efficiency irrigation systems under PIPIP. • Review and give comments and suggestions to improve technical reports. • Preparation of Reports
2007-2012	UNDP Project Biosaline-II "Community Development Project for Rehabilitation of Salt Affected and Waterlogged Lands"	District Manager	<ul style="list-style-type: none"> • Formation of Community Organizations and Ensure their Participation in Rehabilitation of Marginal Lands. • Capacity Building of Farming Communities and Project / Line Agency Staff Through Technical and Social Training Sessions. • Manage Project Implementation Activities at District Level • Rehabilitation of Target Salt Affected and Waterlogged Lands • Supervise Activities Related to Project Interventions for Salinity Management and Land Rehabilitation • Coordination Between Project Staff, Project Communities and Local District Govt. Offices • Establishment of Demonstration Plots, Tree Nurseries, Agricultural Implement Pools, Supervise Installation of Community Tubewells, Fish Ponds and Kitchen Gardens • Supervise Research Related to Rehabilitation of Salt Affected and Waterlogged Lands • Report Writing - Monthly, Quarterly and Annual plus Work Plans • Preparation of Extension Materials I.e. Posters, Leaflets and Pamphlets • Manage Farmer's Field Days, Corner Meetings, Training Sessions and Seminars • Prepare and Present Technical Papers at National and International Forums
1994-2007	International Waterlogging and Salinity Research Institute (IWASRI), WAPDA, Lahore	Senior Agronomist/ Senior Technical Officer	<p>Worked in two community based Bio-saline Agriculture Projects for salinity management, soil reclamation and land rehabilitation in Pakistan funded by International Donors such as United Nations Development Programme (UNDP) and Australian Agency for International Development (AusAID). The nature of duty included:</p>

			<ul style="list-style-type: none"> • Produce Project Operational Guidelines Manual and Field Interventions Manual for the technical staff. • Develop training materials and organize training session for project communities and other stakeholders. • Conduct and Participate in National and International seminars / conferences and workshops in the field of land and water resources management. • Collect and analyze basic data and translate and disseminate information on salinity and waterlogging research into practical advice for transfer to the end users across a wide spectrum ranging from professional personnel to the farmers to the general public. • Participate in the design and implementation of programmes and projects including backstopping, on integrated soil management practices for salt-affected soils through chemical, physical and biological reclamation. • Communicate with the research end users particularly the farmers and the Agricultural Extension Staff through training, pictorial posters, videos, leaflets and field days / demonstrations that helps increase their technical knowledge in the field of agriculture. • Design School Education Programmes on salinity awareness at Primary School level. • Provide technical input in the soil selection, land preparation and layout of the demonstration plots of salt-tolerant trees, crops, grasses and bushes for rehabilitation and reclamation of saline and waterlogged lands. • Provide on-the-spot technical training to the field staff on the use of various soil and water investigation instruments. • Present technical papers based on research conducted by IWASRI. • Manage meetings and workshops on issues related to the management, reclamation and rehabilitation of salt-affected and waterlogged lands. • The overall planning, budgeting, implementation and monitoring of the programs.
1976-1994	Project Planning Organization (NZ), WAPDA, Lahore	Agronomist	Nature of duties mainly concerned Planning of Salinity Control and Reclamation Projects (SCARPs) under the accelerated programme for control of waterlogging and salinity in Pakistan, as

			<p>per details described below:</p> <ul style="list-style-type: none"> • Collection of basic soil and agronomic data such as land use, cropping pattern and intensities, crop yields, management practices, prevailing agricultural facilities, soil salinity, soil classification, land capability etc. in the field as well as liaison with other relevant local agencies in order to establish a basis for further agricultural planning of the SCARP areas. • Planning for the development of land and water resources through interpretation of soil classification, salinity, and capability rating data for reclamation of saline and waterlogged areas. Also conduct field hydraulic conductivity tests to provide basic data for sub-surface drainage design. • Prepare Feasibility Reports in respect of different Salinity Control and Reclamation Projects (SCARPs).
1971-1976	Soil Fertility Survey and Soil Testing Institute, Rawalpindi	Chemical Assistant	<ol style="list-style-type: none"> 1. Physico-chemical Analysis of Soil <ul style="list-style-type: none"> • To assess the fertility status of soil through laboratory tests to suggest measures for the improvement of soil and use of the best suited fertilizers for economic crop production. • To determine salinity/sodicity problems in the soils and suggest reclamation measures, (wherever this threatened good crop yields) for its control by the use of amendment quantities needed for reclamation. 2. Water Analysis <ul style="list-style-type: none"> • To test its suitability for irrigation purpose. 3. Fertilizer Trials in Farmer's Field <ul style="list-style-type: none"> • To formulate fertilizer recommendations for different crops grown under varying soil-climate-management conditions.

WORK UNDERTAKEN UNDER IMPORTANT PROJECTS

Name of Assignment or Project: Punjab Irrigated-Agriculture Productivity Improvement Project (PIPIP) for high efficiency irrigation systems in the Punjab

Project Cost: N. A.

Period: 2012-13 to 2020-21

Location: Throughout Punjab

Client: Government of the Punjab

Sponsor: World Bank

Main Project Features: Installation of high efficiency irrigation systems (HEIS) on 120,000 acres, improvement of 5,500 watercourses in barrage commanded areas, completion of lining on 1,500 partially improved watercourses, rehabilitation of 2,000 irrigation schemes outside the canal commanded areas, and provision of 3,000 LASER units to the farmers/service providers as well as to build capacity of

stakeholders and provide the research backup support for successful adoption of these water management interventions.

Position Held: Soil Scientist in Project Implementation Supervision Consultants (PISC), a Joint Venture of NESPAK and NDC for the project.

Activities Performed: Assist the Project Management in planning and implantation of project activities particularly related to capacity building of farmers and the project staff, production of project manuals related to fertigation and crop production, preparation of extension materials such as pamphlets, leaflets and brochures for dissemination of project activities and visits to the project HEIS sites to provide technical assistance to the farmers.

Name of Assignment or Project: UNDP Project Biosaline-II "Community Development Project for Rehabilitation of Salt Affected and Waterlogged Lands".

Project Cost: N. A.

Period: 2007-12

Location: Jhang, Sargodha and Hafizabad Districts of the Punjab

Client: Government of the Punjab

Sponsor: United Nations Development Program

Main Project Features: The project had a target of rehabilitating 80,000 ha of degraded salt affected and waterlogged lands against which 72,274 ha of land was rehabilitated. The project activities were implemented through grass root community organizations: Salt Land User Groups (SLUGs) for men and Women Interest Groups (WIGs) for women. The project formed 666 Community Organizations: 496 SLUGs and 170 WIGs. The various project interventions included gypsum application for soil reclamation, plantation of salt tolerant crops & trees, growing of nurseries, installation of community tubewells and establishment of agriculture implement pools.

Position Held: District Manager Hafizabad

Activities Performed: Assisted the Project Management in planning and implantation of project activities particularly related to rehabilitation of marginal lands, capacity building of farmers and the project staff, production of project manuals such as Project Operational Guidelines Manual and Field Interventions Manual, preparation of extension materials such as posters pamphlets, leaflets and brochures

Name of Assignment or Project: Pakistan Community Development Project for Rehabilitation of Saline and Waterlogged Land

Project Cost: N. A.

Period: 1998-2005

Location: Three Tehsils - Shorkot of Jhang, Sahiwal of Sargodha and Pindi Bhattian of Hafizabad

Client: Government of Pakistan through IWASRI/WAPDA/MOWP

Sponsor: United Nations Development Program (UNDP) & Australian Agency for International Development (AusAID)

Main Project Features: The project had a target of rehabilitating 25,000 acres of degraded salt affected and waterlogged lands. The rehabilitation of about 18000 acres was completed during the project period. The main project activities were revegetation of salt tolerant plants, growing of nurseries, installation of community tube wells, establishment of fish ponds, demonstration plots and implement pools and capacity building of farmers and the project staff.

Position Held: Senior Technical Officer / Agronomist

Activities Performed: Assisted the Project Management in planning and implantation of project activities particularly related to selection of project sites/ villages, baseline surveys, revegetation of marginal lands, raising nurseries, establishing demonstration plots, construction of fish ponds, establishing agriculture implement pools and capacity building of farmers and the project staff. Also produced extension materials such as posters, pamphlets, leaflets and brochures for dissemination of project activities.

Name of Assignment or Project: Extending the Use of Trees and Forage Shrubs for Productive Use of Salt Affected Lands in Pakistan - Later named as Joint Satiana Pilot Project

Project Cost: N. A.

Period: 1995-1997

Location: Eight Union Councils of Satiana near Faisalabad

Client: Government of Pakistan through IWASRI & PARC

Sponsor: UNDP & AusAID

Main Project Features: The project involved revegetation of 462 acres of marginal salt affected land in eight union councils. The revegetation process involved growing of eucalyptus and salt bushes. More than 370,000 eucalyptus saplings were planted by 250 farmers. The project also involved capacity building trainings of farmers.

Position Held: Agronomist

Activities Performed: On behalf of IWASRI, coordinated the stakeholders to achieve the project targets. Assisted the Chief Technical Advisor, in planning and implantation of project activities particularly related to revegetation of marginal lands, raising nurseries and capacity building of farmers and the project stakeholders.

MAJOR PROFESSIONAL ACHIEVEMENTS

- For capacity building of the farmers and the project staff of PIPIP, managed training sessions both in the field as well as at the Water Management Training Institute Lahore.
- Developed extension material in Urdu for the farmers and the project staff e.g. Interpretation of soil and water analysis reports, Role and deficiency symptoms of plant nutrients, Fertigation schedules for different crops, Water quality and cleaning of high efficiency irrigation system.
- Produced a comprehensive Fertigation Guidelines Manual for the project staff. Its Urdu version particularly fertigation schedules for different crops was also produced for further circulation among the farmers.
- Conducted special field visits to project areas to provide technical advisory services to the farmers and the field staff of the project. Conducted diagnostic surveys of non-functional high efficiency irrigation sites and provided advices to make such sites functional ones. The farmers were provided proper fertigation schedules as and when required.
- Provided soil and agronomic technical assistance in design, installation and operation & operation of about 4000 high efficiency irrigation systems on about 36000 acres' land, improvement of 7000 water courses and 2000 irrigation schemes as part of a World Funded Project "Punjab Irrigated-Agriculture Productivity Improvement Project (PIPIP)" in Pakistan.
- As part of UNDP Biosaline-II Project "Community Development Project for Rehabilitation of Salt Affected and Waterlogged Lands", managed rehabilitation of 29500 acres against a target of 15000 acres of salt affected and waterlogged land lying abandoned for the last 30 to 40 years.
- Produced Field Interventions Manual (FIM) and Project Operational Guidelines Manual (POGM) for UNDP/AusAID Project related to rehabilitation of saline and waterlogged lands.
- Formed Salt Land User Groups (SLUGs) and Womens' Interest Groups (WIGs) in project villages to implement project interventions such as reclamation of salt affected lands through application of gypsum, growing salt and waterlogging tolerant crops, trees, vegetables and salt bushes, establish agricultural implement tools and installation of tubewells in project villages.
- Managed capacity building of farmers and the project staff in technical and social aspects. Arranged study visit of project staff to different agricultural universities and research institutes in India.
- Developed coordination between project and different related institutions. Presented project achievements in different national and international conferences in Australia, Saudi Arabia, Muscat and India.
- As Senior Technical Officer in UNDP/AusAID Biosaline-I Project, I gave technical professional input in rehabilitation of salt affected and waterlogged lands at three tehsils of three different districts.
- For salinity management, I worked for about 18 years as Agronomist in accelerated programme under Salinity Control and Reclamation Projects in Pakistan and provided all sort of soil and agronomic technical assistance to the concerned agency in Pakistan i.e. Water & Power Development Authority (WAPDA).
- Designed questionnaires for male and female respondents for different Agro-Socio-Economic Surveys. Also conducted baseline and follow-up Agro-Socio-Economic Surveys and prepared relevant reports

- Managed and supervised field operations related to land rehabilitation and establishment of tree nurseries, demonstration plots, agriculture implement pools, community tubewells, fish ponds and kitchen gardens
- Published 75 technical papers, reports, pamphlets, leaflets and brochures
- Presented technical research papers at national and international forums particularly in Australia, Canada, UK, Oman, Saudi Arabia and India

SCHOLARSHIP / FUNDING

- USAID Scholarship for One Year Non-Degree Master Level Course in Agricultural Soil Physics at the University of Missouri, Columbia, USA in 1988
- UNDP Scholarship for Two Month Certificate Course in Training and Development at the Thames Valley, Slough, UK in 1997
- UNDP Scholarship for Two Week Course on Measurement and Mapping of Soil Salinity Using Electromagnetic Induction Meters from the Alberta Agriculture, Food and Rural Development Crop Diversification Centre, Brooks, Alberta, Canada in 2001
- AusAID Funding for Two Week Training/Study Visit of Australian Salinity Research Institutes Arranged by Australian Agency for International Development (AusAID) and Commonwealth Scientific and Industrial Research Organization (CSIRO) in 2008
- AusAID Funding for Five Day Training Program on Water Balance Studies on Agroforestry Under the CSIRO/AusAID Project "Improved Prediction of Agroforestry Productivity and Reclamation Opportunities in Shallow Watertable Salt Affected Landscapes of India and Pakistan" at Punjab Agricultural University, Ludhiana, India in 2010
- UNDP Funding to Present Paper at International Conference on Management of Soil and Groundwater Salinization in Arid Regions at Sultan Qaboos University, Muscat, Oman in 2010
- UNDP Funding for Two Week Training/Study Visit of Indian Agricultural Universities and Research Institutes such as Punjab Agriculture University (PAU) Ludhiana, Haryana Agriculture University (HAU) Hisar, Central Soil Salinity Research Institute (CSSRI) Karnal and Indian Agricultural Research Institute (IARI) New Delhi in 2011

PROFESSIONAL MEMBERSHIP

1. Member Soil Science Society of Pakistan
2. Member International Centre of Biosaline Agriculture Network

PROFESSIONAL REFERENCES

1. Mr. Muhammad Sajid, National Manager HEIS, Anchor Commodities Pvt. Ltd. 19 Km Multan Road Lahore-Pakistan Cell: 00923008259939 Email: [Muhammad.sajid@anchor.com.pk](mailto:Mohammad.sajid@anchor.com.pk)
2. Mr. Mukhtar Ahmad, Project Manager, Project-Implementation Supervision Consultants (PSC)-A Joint Venture for Punjab Irrigated-Agriculture Productivity Improvement Project (PIPIP) Lahore-Pakistan Cell:00923334749750 Email: enr_mukhtar@hotmail.com
3. Mr. Najaf Iqbal Syed, Ex National Project Manager, UNDP Project Biosaline-II "Community Development Project for Rehabilitation of Salt Affected and Waterlogged Lands", Lahore-Pakistan. Mobile; 00923441112121 Email: syednajaf@hotmail.com

IMPORTANT PUBLICATIONS

Technical Papers

1. Shah, A.H. and M.A. Mian. Electro-chemical and Chemical Changes in Flooded and Non-flooded Soils. J. Agric. Res. 13(i): 405-16, 1975.

2. Shah, A.H., S. H. Anderson and M. I. Lone. Regression Models to Predict Hydraulic Conductivity from Simple Soil Physical and Chemical Properties. Published in Proceedings Vol.3 of 7Th ICID International Drainage Workshop, Drainage for the 21St Century, held at Penang, Malaysia on 17-21 November 1997.
3. Shah, A.H., M.R. Chaudhry and P.M. Patto. The Waterlogging and Salinity Problem in Pakistan. Published in Proceedings of a Workshop, The Role of Participative Development in Agricultural Extension, organized at Lahore in December 1994.
4. Shah, A.H. and M.R. Chaudhry. Drainage and Reclamation Measures in Satiana Pilot Project. Paper presented in the International Workshop on Sustainable Saline Agriculture organized at the University of Agriculture, Faisalabad in September 1995.
5. Shah, A.H. and M.A. Bodla. Prospects of Using Salt-Tolerant Plants as Forage Crops. Paper presented in the International Workshop on Sustainable Saline Agriculture organized at the University of Agriculture, Faisalabad in September 1995.
6. Shah, A.H., A.B. Sufi, P.M. Patto and M.N. Bhutta. Lessons Learnt from Community Involvement in Drainage and Reclamation Projects. Paper published in the Proceedings of the International Seminar on Changing Roles in Development. The Effects of Community Involvement on Line Agencies and NGOs held on 9.10.99 to 12.10.99 at Peshawar.
7. Shah, A.H., A.B. Sufi and P.M. Patto. Prospects for Saline Agriculture in Pakistan. Paper published in the Proceedings of the 8Th ICID International Workshop held on 31.1.2000 to 4.2.2000 in New Delhi, India.
8. Shah, A.H., A.B. Sufi and M. Ilyas. Farmers' Participation in the Best Use of Saline and Waterlogged Land. Presented in the International Seminar on Prospects for Saline Agriculture held at PARC, Islamabad on April 10-12, 2000.
9. Shah, A.H., A.B. Sufi and M.R. Chaudhry. Bio-Drainage: An Option for Control of Waterlogging in Pakistan. Published in Proceedings of National Seminar on Drainage in Pakistan held at Jamshoro on 16-18 August 2000.
10. Shah, A.H., M.N. Nazi, A.B. Sufi and P.M. Patto. 2002. Salinity Management through Biosaline Agriculture in Pakistan. Paper presented at the Second Saudi Symposium on Halophyte Plantation held in March, 2002 at KACST, Riyadh, Saudi Arabia.
11. Shah, A.H., N. I. Syed and M.N. Bhutta. 2008. Paradigm of a Bio-saline Project for Successful Rehabilitation of Salt Affected and Waterlogged Lands.
12. Shah, A.H., Khalid H. Gill and N. I. Syed. 2010. A Nice Blend of Reclamation and Bio-saline Approach for Land Rehabilitation in Pakistan Paper Presented at International Conference at Sultan Qaboos University, Muscat, Oman.
13. Shah, A.H., Khalid H. Gill and N. I. Syed. 2010. Integrated Salinity Management for Combating Salinity and Waterlogging in Pakistan. Paper presented at 13th Congress of Soil Science at Serena, Faisalabad.
14. Shah, A.H., K. H. Gill and N. I. Syed. 2010. Success Story of Mixed Salinity Management for Rehabilitation of Sal-affected and Waterlogged Lands in Pakistan. Paper presented at International Science Conference at the Faculty of Agriculture Rawalakot University of Azad Jammu & Kashmir on 20-23 July 2010.
15. Shah, A.H., K. H. Gill and N. I. Syed. 2010. Sustainable Salinity Management for Combating Desertification in Pakistan. Paper presented at 4th International Conference on Water Resources and Arid Environments at the King Saud University, Riyadh, Saudi Arabia on 06-08 December 2010.
16. Shah, A.H., K. H. Gill and N. I. Syed. 2011. Experience of Bio-saline Approach for Rehabilitation of Salt Affected Lands in Pakistan. Proceedings of 71st Annual Session of Pakistan Engineering Congress 2006-2011. Volume – 71(Part-2).
17. Shah, A.H., Mehmood Ul Hassan, B. Khanum and N.I. Syed. 2012. Restoration of Salt Affected Lands and Women Empowerment – A Case Study of Pakistan. Paper Presented at National Seminar on Women and Rural Development: Critical Issues held on 2-3 May 2012 Arranged by the College of Home Science, Punjab Agricultural University, Ludhiana, India.

Technical Reports

18. Training Programme for Project and Line Agency Staff: Fundamental Topics - UNDP/AusAID Project PAK/97/024.

19. Training Programme for Project and Line Agency Staff: Personnel Specific Topics - UNDP/AusAID Project PAK/97/024.
20. Field Interventions Manual - Technical and Social
21. Project Operational Guidelines Manual
22. Proceedings of Orientation Workshop on Participatory Reflection and Action (PRA) - UNDP/AusAID Project PAK/97/024.
23. Fertigation Guidelines Manual – PIPIP (First Edition)
24. Baseline Technical Survey of Pindi Bhattian Site - UNDP/AusAID Project PAK/97/024.
25. Reconnaissance Survey: Selection of Villages for Sahiwal Site District Sargodha - UNDP/AusAID Project PAK/97/024.
26. Proceedings of Salinity Education Workshop at Sargodha
27. Training Manual on Nursery Raising Techniques
28. Use of Computer, EM38 Salinity Meter, Data Logger and GPS for Salinity Mapping
29. Effect on Survival and Growth Rate of Tree Saplings Planted in Salt-affected Areas with Plastic Container Bags Totally Removed as Compared to Base Only Removed
30. The Technology Transfer Programme in the Joint Satiana Pilot Project.
31. Reconnaissance Survey for the Technical Selection of Project Sites – UNDP/AusAID Project.
32. Annual and Quarterly Reports of UNDP/AusAID Project PAK/97/024.
33. Annual reports in respect of Soil Fertility Survey and Soil Testing Institute, Rawalpindi for the years 1972-73, 1973-74, and 1974-75.
34. Feasibility Report of Upper Rechna Remaining (SCARP-IV), 1978.
35. Feasibility Report of Lower Rechna Remaining (SCARP-V), 1980.
36. Feasibility Report of Sukh Beas Phase-1, 1980.
37. Bench Mark Survey of SCARP-VI, 1980-81.
38. First Follow-Up Agro-Socio-Economic Survey of SCARP-VI, 1983-84.
39. Second Follow-Up Agro-Socio-Economic Survey of SCARP-VI, 1986-87.
40. Third Follow-Up Agro-Socio-Economic Survey of SCARP-VI, 1989-90.
41. Development of optimum, cost effective land preparation and cultivation for maximizing growth of salt-tolerant vegetation on salt-affected and waterlogged land
42. Establish minimum irrigation requirement for trees and shrubs for maximizing deep rooting without adversely affecting aerial growth
43. Utilization of different quality drainage water for silviculture and agriculture purposes
44. Effect of tree sapling placement and mulching material on survival and growth under salt affected and waterlogged conditions
45. On-farm trials of salt tolerant, nationally approved cultivars for salt-affected/waterlogged farm lands in Pakistan
46. Effect of different soil and water salinity levels, soil amendments and fertilizers on establishment and growth of tree seedlings and other vegetation on salt-affected Land
47. Selection of improved provenances of salt tolerant trees and shrubs for use by farmers for watertable control
48. Gave input in the production of eight Special Report – Follow Up Assistance to HEIS Sites by PSC, document “Training Sessions on Fertigation through Drip Irrigation” by PSC, “Special Report on Scope of Mature Orchards on HEIS” by PSC and document “Fertigation Schedules for Different Crops under Drip Irrigation in Punjab” by PSC
49. PSC Report on Non Functional HEIS (Verified) Sites installed under PIPIP During 2011-2016.
50. Need Assessment for Pre Filtration Facilities in Water Storage Tanks under Drip Irrigation Systems November, 2016
51. Fertigation Guidelines Manual (Second Edition) July 2017
52. Management of Orchards under High Efficiency Irrigation Systems (Second Edition) July 2017

Technical Brochures/Pamphlets/Posters

53. Role of Nutrients and Deficiency Symptoms in Plants (Urdu), May 2014
54. Importance of Soil, Water and Plant Analysis in Drip Irrigation (Urdu)-Revised Version, August 2016
55. Use of Fertilizers in Drip Irrigation (Urdu) April 2016
56. Water Quality and Cleaning of System in Drip Irrigation (Urdu) January 2017

57. Rehabilitation and Use of Saline and Waterlogged Land
58. Poster on advocacy for rehabilitation and reclamation of saline and waterlogged Lands
59. Poster on growing of Eucalyptus on saline and waterlogged Lands
60. Poster on economic value of Eucalyptus
61. Poster on marketing of Eucalyptus
62. Poster showing development and utilization cycle of Eucalyptus
63. Project Brief
64. Reclamation and the Best Use of Salt-affected and Waterlogged Land
65. Work Plan for Reclamation of Salt-affected and Waterlogged Lands
66. Ghungar Ghanghoor Waterlogging and Salinity
67. Cultivation of Sugarcane
68. Production Technology of Wheat
69. Reclamation of Waterlogged and Salt-affected Lands
70. Use of Brackish Water in Agriculture
71. Environmental Effects of Tree Plantation
72. Marketing of Eucalyptus
73. Cutting and Seasoning of Trees
74. Correct Method of Tree Plantation in Saline Lands