



PIDE News

DECEMBER 2015

PSDE, PIDE Organize Conference on Vision 2025



Investing in Human Resources is Government's Top Priority – Ahsan Iqbal, Minister for Planning, Development and Reforms

Professor Ahsan Iqbal, Minister for Planning, Development and Reforms, while inaugurating the 31st Annual General Meeting and Conference of the PSDE, said that in rapidly changing environment, it is inevitable to invest in human resources to become a knowledge economy. We have the option to change our fate by not doing what we have been doing and by looking into future avenues. The Minister highlighted that in 1960s, when Pakistan was on the path to prosperity, everyone thought that Pakistan would become another Japan but derailment of the process of development pegged us back. He said that failure in non-economic factors has kept us behind and political instability has created environment of uncertainty.

The Minister further emphasized that it is the human capital which will bring the change we are waiting for. He added that that fractured social platform is result of the Martial Law and another reason for crisis is the failure to distinguish between growth and development. He further said that the



theme of the Conference is very appropriate because we need to understand how these Vision 2025 goals can be achieved. He said that the enablers outlined in the Vision 2025 are eco-system for the 2025 goals.

Highlighting the role of Pak-China Economic Corridor, he said that CPEC is a game changer and added that governments may change but policies and focus should not change, since stability itself is a great virtue for growth. Professor Iqbal said that soon India would also realize CPEC is very important even for India for its trade with China. CPEC will transform the region, he added.

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The Minister said that the lackluster growth is because of lacking knowledge for commodities and so we are looking-forward to cluster based growth. Pakistan has a great advantage due to its location and Pakistan must move its position from Geo-Strategic to Geo-Economic. Concluding his address, the Minister said that the foreign delegates of the Conference should act as ambassadors and spread the word when they return home that Pakistan is not what CNN makes you believe it to be; rather it is a friendly country. In 2013, Forbes declared Pakistan a crisis state and now in 2015 they see it as an emerging market with strong growth.

Earlier, the Vice Chancellor PIDE, Dr. Asad Zaman, who is also the President of PSDE said in his presidential address that some people are pessimistic about the future but pessimism is part of the problem. He said that with added optimism, the future of Pakistan can be brighter than ever. Progress depends on coordinated effort on multiple fronts, he added. He said that putting people first is required to bring change, as mankind stands as the most important element of universe. He referred to Quran, which distinguishes mankind from all other beings on the basis of having knowledge.

Dr. Zaman further said that history is witness to the transformational power of knowledge. Citing the example of Arabs, he said Arabs were very backward but by the virtue of knowledge they became the leaders of the world for 1000 years. The VC PIDE said that in spite of great scientific knowledge, a moral decline has been observed. He said that our job as a society is to bring mankind to power where they can progress and achieve full potential and therefore to impart knowledge three major components i.e., physical, emotional, and spiritual should be stressed. Dr. Zaman also remembered Mahbub ul Haq, a local unsung hero, who emphasized that humans are both means and ends to growth. The philosophy proposed by Dr. Haq stands in stark contrast to the materialistic school. Therefore, we are looking forward to community driven growth.



Earlier, presenting the Secretary's Report, Dr. Munir Ahmad, Secretary PSDE, said that PSDE is playing its part in bringing positive change in Pakistan. The PSDE invites speakers of global repute for better dialogue. He also explained the concept behind the new logo of PSDE, the green color in which reflects that environment as top priority.

The inaugural session was followed by a panel discussion, the theme of which was "Productivity-Led Growth and Development".

The panel discussion was chaired by the Minister of Planning, Development and Reforms, Professor Ahsan Iqbal. The Ambassador of South Korea to Pakistan, Song Jong-Hwan was the co-chair.

While presenting his views on the theme of the panel discussion, the first panelist Jwa Sung-Hee, Professor of Policy, Saemaul Yeungnam University, South Korea emphasized the instrumental role of corporations for increasing productivity. He said that the key to modern capitalist system are corporations. Markets alone may not always provide explanation for sustained economic growth. Professor Sung-Hee talked about the "Holy Trinity" of economic development and said that the trinity is completed with incorporating a missing link of corporations.



Shenggen Fan, DG IFPRI, Washington, D.C., USA, cleared the definitional discrepancies in the definition of total factor productivity (TFP), emphasizing the need for all the factor inputs while defining the TFP. He asserted that if a major structural shift from agricultural to industrial sector takes place, it must not come at the expense of decline in productivity in any sector. Talking of labor productivity, he said that labor productivity is not low; rather it is TFP which is low, the reason for which is non-inclusion of natural resources, such as water, into TFP. Dr Fan also stressed the need of allocating more GDP to the agricultural research.

Nadeem Javaid, Chief Economist, MPD&R, presented the trajectory of development stages ensuring productivity increase. The trajectory starts with factor-driven stage followed by investment-driven stage characterized by manufacturing and efficiency, which is followed by innovation-driven stage achieved through knowledge education, training, and creativity. Dr Javaid stressed the invigorating the role of government and improving institutional quality to the productivity. In addition, he viewed implementation of reforms and operationalization of social capital as the pre-requisites for increasing productivity. The Chief Economist said that the corporate sector has the better space for raising productivity and in this context Pakistan is lagging behind.



Iqbal upon realizing the importance of productivity and its efficient role in increasing economic efficiency, declared 2016 as the year of productivity, quality and innovation, “the year of PQI”. He also emphasized breaking productivity down into macro-productivity, firm level productivity and individual level productivity.

In the afternoon session, Dr Shenggen Fan, D.G. IFPRI, moderated and chaired a lively panel discussion on “Exports, Regional Connectivity and Growth Potential of Asia”. The panelists included, Syed Komeil Tayebi, University of Isfahan, Iran, Mingtai Fan, Chinese Academy of Social Sciences, Beijing, China, Faheem ul Islam, Member Private Sector Development, MPD&R, and Ejaz Ghani, Professor, PIDE, Islamabad. Dr Fan started off the discussion by highlighting the importance of exports, regional connectivity and growth for not just Asia but Pakistan in particular.

Professor Sayed Komeil Tayebi thanked the organizers for affording him the opportunity to visit Pakistan for the first time and participate in the conference. The speaker focused on sustainability, or lack thereof, connectivity, trade and development as well as highlighting important trends in bilateral trade patterns between Iran and Pakistan. He highlighted the importance of connectivity for improving growth and development. Unsustainable regional and global connectivity causes trade diversion and creation through exchange rate uncertainty, so sustainability in connectivity is essential for countries in Asia. Prof. Tayebi concluded his discussion by highlighting the fact that Pak-Iran trade relations are virtually non-existent and intra-industry trade measures are close to zero, suggesting the need to promote or encourage intra industry trade between the countries.

To address this issue, mutual trust building in the business sector is crucial and mandatory in equal measures. Ali Salman, Executive Director, PRIME Institute, shed light on the ways in which productivity has been given prime importance in the Vision 2025. He also stressed that the Government of Pakistan must minimize wasteful expenditures in the name of R&D.

The Ambassador of South Korea to Pakistan, Song-Jong Hwan, through a case study of Korea, stipulated the endogenous and exogenous determinant factors of high sectoral productivity in Korean economy. These factors include investment in education, sincere leadership, hard-work and sacrifice of people, building infrastructure, forestation, textile sector, heavy chemical industry, relying more on the intellectual driven growth, and export driven growth.

While summing up the panel discussion, Professor Ahsan

Dr Mingtai Fan, focused on different perspectives related to regional connectivity growth potential of Asia in his talk. He stressed two fundamentals that have emerged in current international trade liberalization efforts, the first of which is deeper integration in regional trade, and the second is greater fragmentation in regional economic integration by FTAs. The question is whether these are creating competition or cooperation? Are they stepping stones or stumbling



blocks for multilateral integration of economics? Dr. Fan also highlighted the fact that the dynamic strategies in Chinese FTAs have created shallow integration in terms of flexibility with varying degrees of depth and coverage. They have also created deep integration by One-Belt and One-Way and APFTA strategy. Dr Fan said that there is great potential for South Asian integration and use of other creative destruction mechanisms for international flow of goods and services.

Dr Faheem ul Islam stressed on the importance of South Asia in the global economy in his talk. He said that Asia's diversity is also its greatest strength. The potential of regional connectivity is currently untapped and great enhancements in trade can result from better inland connections. Pakistan will play a key role in facilitating such connectivity. Dr Islam highlighted the key features of CPEC and how it will benefit not just Pakistan but Asia as well. He stressed the need to prioritize regional infrastructure development which is a win-win situation for all countries. Dr. Faheem concluded by acknowledging that major benefits and challenges exist in regional integration and we require an economic paradigm rooted more in domestic demand, particularly consumption.

Dr Ejaz Ghani pointed out that Pakistan has been struggling to boost its exports and benefit from trade liberalization efforts. Regional integration is important for export promotion, but robust growth cannot be achieved unless certain factors counting exports; supply bottlenecks such as energy shortages and limited diversification of exports are addressed. A recent initiative for Regional Comprehensive Economic Cooperation is an important effort that Pakistan desires to be part of Pakistan is well integrated with ASEAN economies and ample trade potential can be tapped if Pakistan diversifies its trade.

The proceedings of the Day 1 of the 31st AGM & Conference of the PSDE ended with the traditional Allama Iqbal Lecture, which was delivered by Jwa Sung-Hee, Professor of Policy, Saemaul Yeungnam University, South Korea. The theme of his lecture was "Achieving Sustained, Indigenous and Inclusive Growth". Paul Vendenberg of the Asian Development Bank Institute (ADBI), and Qazi Azmat Isa, Chief Executive Officer, Pakistan Poverty Alleviation Fund (PPAF) were the discussants, while Syed Nawab Haider Naqvi, former Director PIDE and founding President PSDE was in the chair. In his lecture, Professor Sung-Hee proposed that we should try to understand the issue of inclusive growth, which the current ideology of economics is failing to address. Identifying extractive and inclusive institutions, he elaborated on why nations fail. He declared economic discrimination to be a necessary condition of economic development, stressing that egalitarianism can become a trap by helping those who are not efficient. The discussants tend to agree with the presenter and stressed the need to keep efficiency in focus. Vendenberg believed that political regimes, due to compulsions, do not always take perfect decisions. While discussing the lecture, Qazi Azmat Isa said that South Korea kept on the sustained path of development irrespective of the political regime because it had invested heavily in his social sector. Concluding the discussion, Professor Naqvi said that those countries become developed which grow continuously for twenty-five years.

On the second day of the 31st AGM & Conference of the PSDE, organized by PIDE, the panel discussion on “Keeping the Incentive: Investment in Energy, Water and Food Security” generated lively debate. Leading the discussion, Dr. Golam Rasul, ICIMOD, Kathmandu, Nepal, stressed on the serious food and water security issues that Pakistan is facing. Pakistan stands at 76th in Food Security Index and one-third of the population lacks safe drinking water. With rapidly increasing population, the demand is expected to increase by 50 percent for safe drinking water, 10 percent for energy and 2 percent for food. Dr. Rasul suggested that Pakistan should reconsider the production of rice, sugarcane and other water-intensive crops in face of current water crisis.

Dr. Iqrar A. Khan, VC Agriculture University, Faisalabad, said that the farmers should grow those crops that have more export share, such as edible oil and pulses. Patrick T. Evans, FAO Representative in Pakistan, stressed the need to adopt more efficient production techniques because international food prices are showing declining trend and it is eroding competitiveness of Pakistan in international markets. Mubarak Ali, Member, Food Security, MPD&R, echoed the same concerns. He said that compared to regional competitors, particularly India, our cost of production is much higher due to inefficiencies in use of fertilizers and water, resulting in lower average yield.

Dr. Rehana Siddiqui, Professor, PIDE, said that Diamer-Bhasha and Dasu dams are crucial for meeting future energy demands in Pakistan. She highlighted the fact that infrastructure quality of electricity supply is very bad in Pakistan relative to other countries of the SAARC region. Energy mix should be chosen very carefully, keeping in mind the issues of food security and environmental issues, she further added.

The second day of the Conference began with parallel technical sessions, in which twenty papers were presented on varied themes related to the development of Pakistan.

Echoing the views expressed by the Federal Minister for Planning, Development and Reforms in the inaugural address of the 31st AGM & Conference of PSDE, a paper on the role of authoritarian regimes in economic development, the authors said that the quality of social services decline during dictatorship and as a result dictatorship hampers economic development, resulting in significant reduction in human development index (HDI). In a presentation on “Pakistan’s Governance Goliath”, the authors said that duopoly of elite and generalist cadre of the civil service is responsible for the dismal performance of the FBR. There is a grand design by which the appointment of non-professional chairperson of FBR is made, he added. He further said that the elite oligarchy has a hold on the FBR through their proxy, which is the non-professional chairperson.

The second panel discussion of the day was on the theme of “Transparency and Sustained Growth: The Role of Governance and Institutional Reforms”. Ugo Pagano of the University of Siena, Italy, said that humans are means and ends in themselves. The neoclassical school, on the other hand, differentiates between means and ends. Speaking on the occasion, Sakib Sherani said that economic governance cannot be divorced from political governance. He further said that increased political competition is good for Pakistan. Arndt Husar, Deputy Director UNDP Global Center for Public Service Excellence, Singapore, likened economic growth with turtle, which has survived as the oldest living fossil and yet has transformed. He said that civil servants should lead institutional change. Tokhir Mirzoev, Resident Representative for Pakistan, IMF, said that good governance and strong institutions are keys to economic success and Pakistan should keep an eye on its neighbors for a quick review of success. In the end, Philipp Kauppert, Resident Director, FES, in this comments said that the real question is who actually benefits from status quo in Pakistan.

The day concluded with the Sarfraz K. Qureshi Memorial Lecture, which was especially arranged this year to pay tribute to Dr. Sarfraz K. Qureshi, who was one of the most well-known development economists of Pakistan, a former Director of PIDE and President PSDE. The theme of the lecture was “Energy, Water and Food Security”. The lecture was delivered by Shenggen Fan, D.G. IFPRI, Washington, D.C., USA.



The third day of the Conference began with the second parallel technical session in which twenty papers were presented, covering wide-ranging topics, including fiscal decentralization, development of human and social capital, economic policies for development, and indigenous and inclusive growth. A paper on the impact of microcredit on education and healthcare spending showed that microcredit borrowers are more likely to spend on healthcare than non-borrowers. As far as spending on education is concerned, the behavior of both borrowers and non-borrowers was found to be the same. Analysis in another paper on returns to education revealed that the returns to education for wage-earners have increased in Pakistan. However, there is discrimination against females and people from rural areas in the labor market in shape of lower wages.

Another paper on philosophical underpinnings of social capital linked social capital to economic growth. The authors of the paper called for incorporation of ethics and values in mainstream economics discourse. It also highlighted the fact that state has responsibility in shaping ethics and social interactions. In discussion on social capital during the technical sessions, the overall consensus was that social capital has eroded over time in Pakistan. It needs to be seen that why is it so and what can be done to halt the erosion.

Linking indebtedness and poverty, the authors of another paper critiqued over-reliance on internal and external debt for achieving economic stability. The analysis in the paper showed that Pakistan is caught in a debt-trap and the pro-poor government expenditures are being slashed to pay back the loans. The paper also claimed that it is the poor who are bearing the brunt of the tax burden.

Authors of a paper on public-private partnership in education highlighted the fact that Pakistan has the highest levels of out-of-school children, which has implications for economic development. The socioeconomic analysis of energy losses in the economy is an important area that has received little attention in the literature so far, claimed a paper on socioeconomic analysis of household energy security. The author claimed that electricity providers and consumers are equally to blame for losses. Furthermore, losses due to profligate use are 1 percent while unlawful connections and theft account for the lion's share. The author suggested that the government should make use of 3D surface maps to eradicate electricity losses at country level. The discussant of the paper, however, cautioned against using the results from the paper because of problems with the methodology employed.

The third and final day of the 31st AGM & Conference of the PSDE, organized by PIDE, concluded with the prestigious Quaid-i-Azam Lecture. The Quaid-i-Azam Lecture was delivered by Professor Ugo Pagano, University of Siena, Italy. The presentation was discussed by Dr. Musleh ud-Din and Dr. Idrees Khawaja, both associated with PIDE, Islamabad.

PIDE and Seven other Universities Signs MOU with the Senate of Pakistan:

The Pakistan Institute of Development Economics along with seven other prominent universities of the country signed MoU with the Senate of Pakistan. Under the arrangement of this signed MoU, at the end of each semester, ten PIDE students/recent graduates will get the prestigious opportunity to serve as interns for the Senate of Pakistan. The Vice-Chancellor, PIDE, Dr. Asad Zaman signed the MoU on behalf of PIDE on this occasion where prominent senators were also present.



News Paper Articles by PIDE Staff

The following articles of Dr. Asad Zaman, Vice-Chancellor, PIDE were published in the daily Express Tribune:

- **The Swiss referendum on Sovereign Money**
(December 7, 2015)
http://epaper.tribune.com.pk/DisplayDetails.aspx?ENI_ID=11201512070134&EN_ID=11201512070050&EMID=11201512070021
- **The Mirage of Terrorism**
(December 14, 2015)
http://epaper.tribune.com.pk/DisplayDetails.aspx?ENI_ID=11201512140065&EN_ID=11201512140025&EMID=11201512140010
- **The Software of Development**
(December 21, 2015)
http://epaper.tribune.com.pk/DisplayDetails.aspx?ENI_ID=11201012200503&EN_ID=11201012200151&EMID=11201012200080

The following article by Dr. Anwar Hussain was published in the daily News.

- **Dependence on Agriculture**
(December 3, 2015)
<http://www.thenews.com.pk/print/79304-dependence-on-agriculture>

Agriculture and Environment Division

Recent Research Publications:

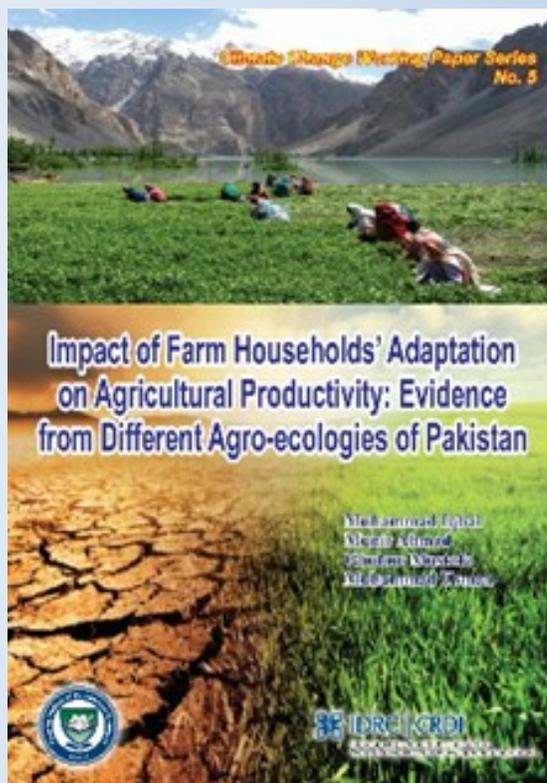
Impact of Farm Households' Adaptation on Agricultural Productivity: Evidence from Different Agro-ecologies of Pakistan by Muhammad Iqbal, Munir Ahmad, Ghulam Mustafa, and Muhammad Usman

Published in: Climate Change Working Paper No. 5

ABSTRACT

This study has utilised the Climate Change Impact Survey (CCIS, 2013) data and applied Treatment Effect Model (Heckman type) to analyse the impact of identified adaptation strategies if implemented in isolation or as portfolio (package of two or more) strategies on net revenue earned from wheat production in Pakistan. The implementation of adaptation strategies including varietal change, delayed sowing, and input intensification effect net revenues positively and significantly if adopted separately or as a part of portfolio strategies. Interestingly, the portfolio adaptation strategies missing delayed sowing resulted in either insignificant results or in reduced net revenues from wheat production. The evidence is found temperature (Nov-Dec.) and precipitation (March-April) norms and deviations of Jan-Feb. temperature from norm of the period are important determinants of net revenue. The results are supportive that fertility of land, farmer's tenancy status, size of holding, non-farm income, and access to certain extension source are important determinants in the selection of various adaptation strategies. The study suggests revisiting the recommendations regarding wheat sowing dates by agricultural research institutions.

Keywords: Agriculture, Wheat Yield, Climate Change, Adaptation, Growth Stages, Pakistan, and Treatment Effect Model



Impact of Farm Households' Adaptations to Climate Change on Food Security: Evidence from Different Agro-ecologies of Pakistan by Munir Ahmad, Ghulam Mustafa, and Muhammad Iqbal
Published in: Climate Change Working Paper No. 6

ABSTRACT

The study used data from 3298 food crop growers in Pakistan. Potential Outcome Treatment Effects Model was applied to evaluate the impact of adaptations on household food security. A household Food Security Index (FSI) was constructed applying PCA. Adaptation strategies employed by the farmers in response to climate change were categorised into four groups namely: changes in sowing time (C1); input intensification (C2); water and soil conservation (C3); and changes in varieties (C4). Out of 15 mutually exclusive combinations constructed for evaluation, only 7 combinations were considered for estimating the treatment effects models because of limited number of observations in other cases. Results of only two of the 7 are discussed in the paper, as the other 5 had very small number of adapters and the impact measures shown either insignificant results or had opposite signs. The first (C1234) combined all the four while the second (C234) combined the last three strategies. The results suggest that the households which adapted to climate changes were statistically significantly more food secure as compared to those who did not adapt. The results further show that education of the male and female heads, livestock ownership, the structure of house—both bricked and having electricity facility, crops diversification, and non-farm income are among the factors which raise the food security of farm households and their impacts are statistically significant. The variables which are significantly negatively associated with the food security levels include age of the head of household, food expenditure management, households having less than 12.5 acres of land—defined as marginal (cultivate <6.25 acres) and small (cultivate >6.25 to ≤12.5 acres). Farmers of cotton-wheat, rice-wheat, and rain-fed cropping systems are found to be more food secure as compared to the farmers working in the mixed cropping systems where farm holdings are relatively small and high use of tube-well water adding to salinity of soils. It is crucial to invest in the development of agricultural technological packages addressing issues of climate change relevant to different ecologies and farming systems; improve research-extension-farmer linkages; enhance farmers' access to new technologies; improve rural infrastructure; development of weather information system linking meteorological department, extension and farmers; and establishment of targeted food safety nets as well as farm subsidy programs for marginal farm households.

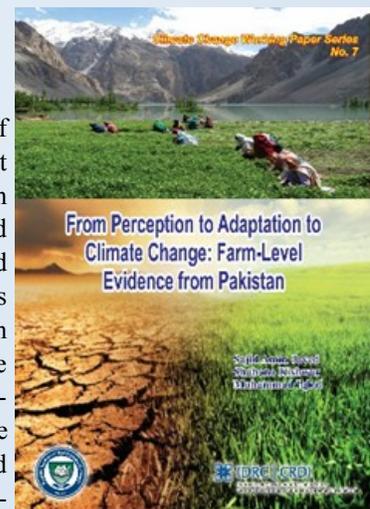
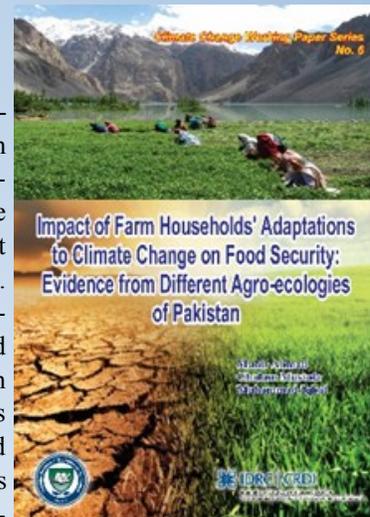
Keywords: Adaptation to Climate Change, Food Security and Treatment Effects Model

From Perception to Adaptation to Climate Change: Farm-Level Evidence from Pakistan by Sajid Amin Javed, Shabana Kishwar, and Muhammad Iqbal
Published in: Climate Change Working Paper No. 7

ABSTRACT

The economic costs of climate change are principally dependent on extent of adaptation to the changing climate. This study explores how farmers with different socioeconomic characteristics and land endowments perceive long term changes in climate and, correspondingly, how do they update their farming practices? We contend that different socio-economic endowments, social interactions and exposure to and source of information may shape significant differences in climate change perceptions and the corresponding adaptation strategies of the farmer(s). The analyses are based on data from Climate Change Impact Survey [CCIS (2013)] wherein 3430 farmers were interviewed from farming communities of Pakistan. Applying Exploratory Data Analysis (EDA) and Heckman's Treatment Effect model, we find the evidence that climate change perceptions and resulting adaptation strategies vary across gender, size of land holdings and the land ownership status and that the difference is significant statistically. The results further indicate that family size, access to credit, land holdings size, government extension and farm experience are significant determinants of farm level adaptation. Farmers with small land holdings and those who are tenant are found more responsive to climate change through effectual adaptations.

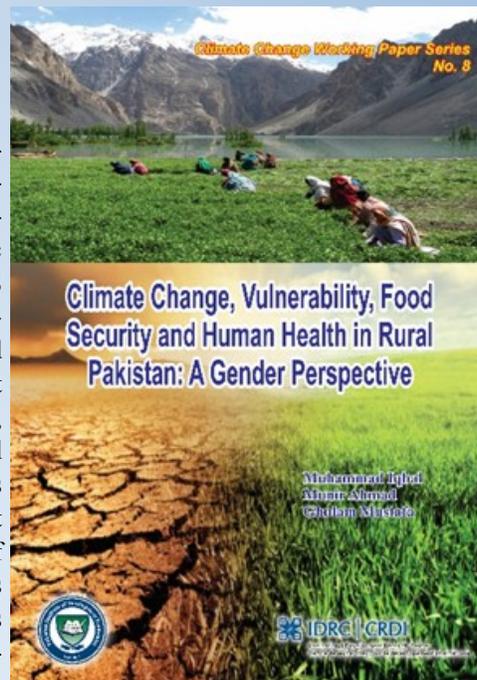
Keywords: Perceptions; Adaptations; Economic Costs; Climate Chang; Agriculture; Farm Size; Land Ownership Status; Pakistan; Heckman Model



Climate Change, Vulnerability, Food Security and Human Health in Rural Pakistan: A Gender Perspective by Muhammad Iqbal, Munir Ahmad, and Ghulam Mustafa
Published in: Climate Change Working Paper No. 8

ABSTRACT

The study primarily focused on mapping farm households' vulnerability index and to identify gender differentiated determinants of vulnerability, food security, and health vulnerability. PCA has been applied to generate vulnerability indices by combining different socioeconomic and climatic factors. The study uses data of Climate Change Impact Survey [CCIS (2013)]. The results indicate that high vulnerability to climate change prevails in the study area. Further, the results obtained from descriptive, and ordered Logit, and binary Logit/Probit regression models are suggestive that those households where females are empowered through decision making, entitlement to inheritance, are more educated, and can participate in social gatherings and are allowed to visit hospital are found less vulnerable as compared to male dominant families. Moreover, female empowerment makes farm households more food secure, and lesser vulnerable in terms of health vulnerability. The study also observes the gender specific perceptions to climate change, and findings reveal that male and female decision makers are found perceiving climate change and having some significant differences regarding perceptions.



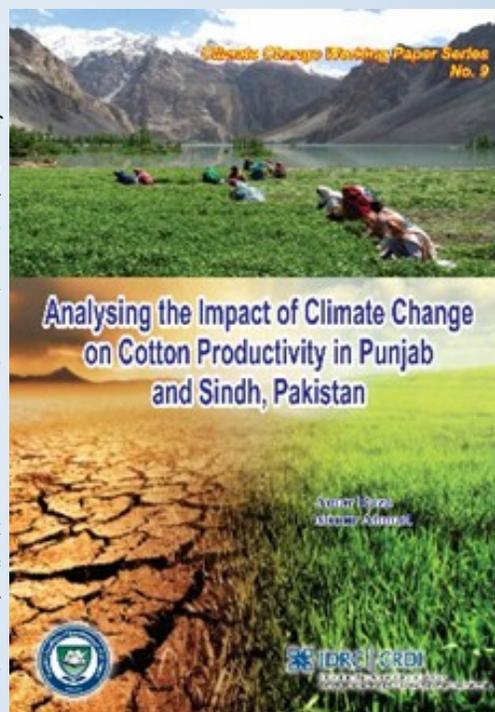
Analysing the Impact of Climate Change on Cotton Productivity in Punjab and Sindh, Pakistan by Amar Raza and Munir Ahmad
Published in: Climate Change Working Paper No. 9

ABSTRACT

The study analyses the impact of climate change on productivity of cotton in Pakistan using the district level disintegrated data of yield, area, fertilizer, climate variables (temperature and precipitation) from 1981-2010. Twenty years moving average of each climate variable is used. Production function approach is used to analyse the relationship between the crop yield and climate change. This approach takes all the explanatory variables as exogenous so the chance endogeneity may also be minimized.

Separate analysis for each province (Punjab and Sindh) is performed in the study. Mean temperature, precipitation and quadratic terms of both variables are used as climatic variables. Fixed Effect Model, which is also validated by Hausman Test, was used for econometric estimations. The results show significant impact of temperature and precipitation on cotton yields. The impacts of climate change are slightly different across provinces—Punjab and Sindh. The negative impacts of temperature are more striking for Sindh. The impacts of physical variables—area, fertilizer, P/NPK ration and technology, are positive and highly significant. The results imply educating farmers about the balance use of fertilizer and generating awareness about the climate change could be feasible and executable strategies to moderate the adverse impacts of climate change to a reasonable extent.

Keywords: Climate Change, Cotton Productivity, Production Function, Fixed Effect Model, Linear Effects and Marginal Effects



Project Evaluation & Training Division

Report of FATA Development Indicator Household Survey Launched

Final report of the World Bank Funded project titled “FATA Development Indicator Household Survey (FDIHS-2013-14)” was launched on December 28, 2015 in Serena Hotel. The PIDE led the project in collaboration with IM Sciences, Bureau of Statistics and FATA Secretariat, Govt of Khyber Pakhtunkhwa. **Dr Usman Mustafa** was the team leader while **Dr Anwar Hussain** and **Syed Abdul Majid** worked as Project Coordinator and Monitoring specialist respectively in this project.



Department of Environmental Economics

Research Published

Muhammad Umar and Anwar Hussain (2015). Economic and Environmental Perspective of the Micro Hydro Power Plants in District Dir, KPK. *The Pakistan Development Review*. 54(4): 487-505.

The recent energy crisis combined with environmental degradation has led the planners to switch to renewable and clean energy technologies. The present study aims to estimate the cost and benefits of Micro hydro power (MHP) plants in rural areas of District Dir (U), Khyber Pakhtunkhwa of Pakistan. The study further assesses the environmental sustainability followed by identifying the challenges in the way of Micro Hydro Power plants. For the analysis, both primary data as well as secondary data is used. Descriptive statistics, Financial and Economic analysis followed by Participatory Reflection and Action (PRA) techniques are used for the analysis of data. The result of the study shows that the expenditure made by MHP connected households on alternative energy sources is less as compared to the expenditure made by WAPDA connected households. Financial and Economic analysis show that MHP is a feasible and viable technology. The electricity tariff charged by MHP projects is also low as compared to WAPDA electricity. Further, the available MHP units in the area can reduce the Green House Gas (GHG) emissions by 3180 tons of CO₂eq per annum by replacing the use of fossil fuels. If the project is registered with CDM, it will earn \$95400 per annum. Based on these results, policy makers should adopt the policy of renewable energy in rural areas in the form of Micro hydro power technology. The government should impart basic skills to the operators of the plants. There is also a need for proper institutional arrangement to tackle the issues of floods, repairing and other social issues associated with Micro hydro power.

Anwar Hussain and Asma Saeed (2015). Environmental Impacts of Standard of Living: A Case Study of Mardan District, Khyber Pakhtunkhwa in Pakistan. *Book of Proceedings of the Sixth international scientific agricultural symposium “Agrosym 2015”* held on October 14-18, 2015 in Bosnia Herzegovina. Original scientific paper No. 10.7251Pages 1361-1367

Household income plays an important role in the improvement of the standard of living. However as the standard of living of the household improves, it also causes environmental degradation. This study investigates the environmental impacts of living standard of the households in the District Mardan. The impact of other factors such as household size, location of the household (urban or rural) and education of the households is also estimated. The study used primary data of 267 households collected through the questionnaire. The sample has been proportionally allocated between two sub-districts namely, Mardan and Takhtabhai. Accordingly the sample size for each Tehsil is 193 and 74 households respectively. Further, the sample size for each Tehsil is allocated to rural and urban areas proportionally. Accordingly, from the whole districts Mardan, 54 households from urban and 213 households from rural areas were selected. The respondents in both rural and urban areas have been selected randomly. The analysis was made through descriptive statistics and regression model. Findings show that household income is significant factor in increasing CO₂ emissions in District Mardan. A positive relationship is also found between household size, education and CO₂ emissions. Findings also revealed that Environmental Kuznets Curve (EKC) is valid in case of rural areas but not in urban areas because the urban consumers use more carbon intensive commodities. Hence an effective policy formulation stressing on public awareness programs, incentives of tax reductions, and better public transport network is conducive to the reduction of CO₂ emissions in the selected District.

S.No	Name of Faculty (PI & CO-PI)	Title of the Research Project	Funding Agency	Status
1	Sara Jabeen and Anwar Hussain	Pakistan with and without SAFTA	South Asia Network of Economic Research Institute (SANEI)	In Progress
2	Junaid Alam Memon and Anwar Hussain	Groundwater Water Sustainability in Baluchistan	IFPRI	In Progress
3	Junaid Alam Memon and Anwar Hussain	Weather Shocks, Coping Strategies and Farmers Livelihood: A case of Rural Areas of District Multan, Punjab	HEC	In Progress

Research Submitted for Publication

S. No	List of Studies with Complete Reference
1.	Anwar Hussain and Jaffar Hussain. "Trends in Domestic Terms of Trade of Agricultural sector of Pakistan" German Journal of Agricultural Economics.
2.	Anwar Hussain and Muhammad Rahman. "The Future of Gas Consumption in Pakistan: Evidences from Time Series Econometric models" FWU Journal of Social Sciences.
3.	Anwar Hussain and Muhammad Rahman. Role of Trainings on Farmers' Profitability in Mountainous Areas of District Swat". Pakistan Journal of agriculture research.
4.	Anwar Hussain and Rabia Bangash. "Impact Of Climate Change On Crops Productivity Across Selected Agro Ecological Zones In Pakistan" The Pakistan Development Review. (Special issue).
5.	Naveed Hayat, Anwar Hussain and HazratYousuf. " Food demand pattern of households across income groups in Pakistan" Amfiteatru Economic
6.	Naveed Hayat, Anwar Hussain and HazratYousuf. " Food Demand in Pakistan: Analysis and Projections" South Asia Economic Journal
7.	Syed Sundus Raza and Anwar Hussain. The Nexus of Foreign Direct Investment, Economic Growth and Environment in Pakistan" The Pakistan Development Review.
8.	Anwar Hussain and Tayyeba Gul. Is Manufacturing sector the Economic Growth Trajectory In Pakistan? Analyses of Social Issues and Public Policy
9.	Junaid Alam Memon, GulalaiJomezai, Anwar Hussain and Others. Farmers' enthusiasm for revival of tradition karez systems in Balochistan. Human Ecology
10.	AsmatUllah, Sylvain R. Perret, Shabbir H. Gheewala, PeeyushSoni. Eco-efficiency of cotton-cropping systems in Pakistan: An integrated approach of life cycle assessment and data envelopment analysis

Department of Development Studies

Discussion Papers:

A Study of Status of Livelihood Assets at Household Level: Evidence from Saidpur Villageby Ms. Sara Kamal Bajwa (DS-2012).

Ms. Bajwa carried out an ethnographic study of a village in Islamabad. This discussion paper studies the standard of living of the residents of this village, the number and type of assets they own and the level of household poverty in order to develop an indigenous model of development for this village based primarily on a sample survey of the population.

Recent debates, whether academic or on policy formulation, on rural poverty reflect that awareness is growing on how symptoms and causes of poverty can be traced to a lack of assets, and the importance of the livelihood concept in understanding how rural poor can use a variety of different resources and activities to sustain and bring an improvement to

Department of Econometrics and Statistics

Internal review of M.Phil thesis of following students are conducted

S.	Name of Students	Thesis Title	Supervisor
1	Farah Nagar Kanwal	Effect of Diet Diversity & Socio Economic Status on Expect-	Dr. Zahid Asghar
2	Muhammad Qayyum	"Influence of Distance, Culture and Perceived Corruption on	Dr. Saqlain Raza
3	Neelum Younis	A Data Mining Approach: Classification and Regression	Dr. Zahid Asghar

External review and defense of final M.Phil thesis of following student is conducted

S. No.	Name of Students	Thesis Title	Date of Defense	Supervisor
1	Amjad Rizwan	“Asymmetric Analysis and Re-gime Switches for Marshal-Lerner Condition: In case of Pa-kistan”	November 23, 2015	Dr. Nasir Iqbal

1. Organized a “Thesis Writing Workshop” on Thursday, December 10, 2015 at 02:00pm.
Trainer: Dr. Abdul Qayyum, Joint Director, PIDE

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