In the post-Cold War era, the term 'National Security' has acquired broader connotations. In the 21st century, 'National Security' extends beyond relying simply on hard power means. It includes non-traditional security challenges in order to ensure comprehensive national security.

Pakistan, for quite some time has also been facing a host of non-traditional security challenges that have seriously impacted its development, growth, economic progress, as well as political stability. These non-traditional security challenges including environmental degradation, food and water scarcity and unprecedented population explosion merit urgent attention before they spiral out of control, posing a threat to the survival and development of Pakistan.

The Institute of Strategic Studies, Islamabad (ISSI) considers that Pakistan’s regional and internal security environment is complex and complicated. In the given context, there is a need to identify these non-traditional challenges along with the traditional challenges and also develop a strategy that would enable Pakistan's policy makers and opinion leaders to optimally confront and neutralize these challenges.

The seminar will bring together a core group of experts and officials in order to put together concrete recommendations in this regard. The recommendations will culminate into a national level strategic framework for Pakistan to timely deal with these non-traditional security threats.

Pakistan’s state institutions have largely remained focused on maintaining stable law and order situation amidst fog of unprecedented internal and external threats. Moreover, like other South Asian countries, Pakistan has also been facing a number of non-traditional security challenges that have seriously impacted its development, growth, economic and political stability. Pakistan has been identified as one of the most vulnerable countries to environmental degradation, especially when faced with the adverse implications of global climate change.
In Pakistan, low-probability and high-impact events such as earthquakes, floods, droughts, storms and cyclones have been increasing in frequency, inflicting unbearable human and financial losses. The case in point being the earthquake of 2005 that caused approximately 0.1 million deaths, made 3.5 million people homeless and incurred $5.2 billion financial losses; and the floods of 2010 that wreaked havoc affecting 20 million people. Climate change and variations in precipitation patterns also affect agricultural production, exacerbating food shortages. Food scarcity is an issue that is being predicted to be one of the most important problems that will be faced by the states in the future. Dwindling fresh water resources has led many scholars to speculate inter-state ‘water-wars’ in not too distant future.

Pakistan’s large population and high growth rate adversely affect all aspects of society, the economy and the environment. Population growth creates and exacerbates vulnerabilities by endangering basic civic amenities, leading to scarcity of food, clean water, space for housing and infrastructure, unbridled urbanization and ultimately burdening the state and the society. Ideally the non-traditional challenges require trans-border regional cooperative strategies, however our hostile neighbourhood further heightens our challenges. These non-traditional issues can have very serious consequences for the security, stability and the peaceful development of the country in the near future.

Objectives:

1) Map the existing narratives on Non-traditional Security challenges to Pakistan, accounting for all dimensions and perspectives.
2) Analyze the response to Non-traditional Security challenges, and determine how pragmatic and relevant they are within the context of Pakistan.
3) Produce policy relevant recommendations by bringing together a core group of experts and officials specialising in Non-traditional security sphere.

Pakistan, unlike its other Asian neighbours, is particularly vulnerable to climate change, as its socio-economic fabric is largely agrarian, which makes it highly climate sensitive. Pakistan is ranked at 8th position in the index of most affected countries by the effects of climate on the Climate Risk Index 1992-2011. Pakistan can mitigate the adverse effects of natural disasters through early warning systems, technological advances in building and infrastructure construction, improved sanitation systems, increased disaster preparedness, and having an effective emergency response strategy. Expanding and enhancing the information and knowledge base on climate change, as well as mapping vulnerabilities, can help create adaptive measures for reducing the effects of climate change.

Apropos in view, carry out an appraisal of domestic, regional and global factors contributing to environmental degradation with a view to proffer input for futuristic policy formulation to meet the challenges of environmental degradation and to make Pakistan a sustainable, thriving and prosperous state.
Population explosion and resultant unbridled, unchecked and unplanned urbanization is clearly a major issue afflicting Pakistan. Large population and high growth rate adversely affect all aspects of society, the economy, and the environment. Population growth creates and exacerbates vulnerabilities by endangering basic civic amenities, leading to food shortages, dwindling clean water resources and space for housing, and ultimately burdening the state and the society. Pakistan has the highest urbanization rate in the South Asian region, and the process of urbanization is characterized by sharp socio-cultural and geo-physical diversities. Here, as with many other developing countries, most population growth happens in areas that are below the poverty line, and survive in a subsistence economy, living in disaster prone areas.

Apropos in view, carry out an appraisal of the efficacy of policy measures undertaken thus far to regulate population growth with a view to suggest a pragmatic approach suitable for our socio-cultural milieu.

Growth in agricultural productivity has broadly kept pace with accelerating food demand in the country. However, medium-term food security challenges will become far more daunting if immediate attention is not paid to managing water resources, both underground and in the Indus Basin river system. Due to scarcity of irrigation water, the farmers are shifting cultivation from water intensive crops like rice, wheat, cotton and sugarcane (staple food) to low water intensive crops and vegetables, thus putting pressure on food market. Moreover, the crops yield is declining due to evaporation and severe temperatures during long summer season. Food insecurity is a major hindrance to social and economic development of the country and needs critical scientific inquiry, and idea of viewing this issue in terms of climate change carries with it a multipronged strategy to address the issue seriously.

Apropos in view, carry out an appraisal of the factors affecting food security in Pakistan with a view to suggest a holistic approach to make Pakistan a sustainable, thriving and prosperous state.

Water security is the most serious challenge for Pakistan due to several factors, particularly the increasing pressure of population and urbanization, massive expansion of tube-well irrigation, reduced levels of precipitation caused by climate change, and the accelerated retreat of Himalayan glaciers. Pakistan receives less the average rainfall in the world, therefore, the Indus River System which is the lifeline for Pakistan has been severely affected. However, the political, economic, and technological management of water resources has been woeful because of the lack of consensus on the construction of mega projects. According to the World Bank, Pakistan is moving from a water stressed country to a water scarce country. From agricultural purposes to power generation; from domestic use to industrial purposes, the water resources have been used extensively without enough management on sustainable grounds. Recently, Pakistan’s eastern neighbour has adopted an extremely hostile posture, linking cooperation on Indus Water Treaty with situation in Occupied Kashmir. If not amicably resolved, this would further aggravate the water security issue.

Apropos in view, carry out an appraisal of the inland and trans-border factors affecting water security in Pakistan with a view to suggest a viable policy to make Pakistan a sustainable, thriving and prosperous state.
# Seminar Programme

## INAUGURAL SESSION

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<tr>
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<td>Registration</td>
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<td>1000 hrs</td>
<td>Recitation from the Holy Quran</td>
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<td>1005 hrs</td>
<td>Welcome and Introductory Remarks - Ambassador Khalid Mahmood, Chairman ISSI</td>
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<tr>
<td>1015 hrs</td>
<td>Address by Lt. Gen. (R) Nasser Khan Janjua, National Security Advisor of Pakistan</td>
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<td>1030 hrs</td>
<td>Tea Break</td>
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## SESSION I: ENVIRONMENTAL DEGRADATION

**Chair:** Ms. Romina Khurshid Alam - Parliamentary Secretary for Climate Change

<table>
<thead>
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<tr>
<td>1100 hrs</td>
<td>Identifying the Environmental Challenges facing Pakistan Dr. Ghulam Rasul - DG, PMD</td>
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<tr>
<td>1115 hrs</td>
<td>The Impacts of Environmental Degradation on Pakistan: Implications for National Security Mr. Javed Ali Khan - Country Head, UN Habitat Pakistan</td>
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<tr>
<td>1130 hrs</td>
<td>Overcoming Environmental Challenges: Recommendations and Future Discourse for Pakistan Dr. Abid Qayyum Suleri - Executive Director, SDPI</td>
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<td>1145 hrs</td>
<td>Q &amp; A</td>
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<td>Concluding Remarks by the Chair</td>
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## SESSION II: POPULATION EXPLOSION

**Chair:** Mrs. Saira Afzal Tarar - Federal Minister for National Health Services, Regulations and Coordination

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<th>Time</th>
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<tr>
<td>1210 hrs</td>
<td>Population Explosion and its Challenges to Pakistan's National Security Dr. Asma Hyder Baloch - Member Social Sector and Devolution, MPDR</td>
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<tr>
<td>1225 hrs</td>
<td>Pakistan's Growing Population: Measures for Exploiting the Youth Bulge Ms. Puruesh Chaudhary - Founder/President, AGAHI</td>
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<tr>
<td>1240 hrs</td>
<td>Meeting the Challenges of Population Growth in Pakistan: Suggestions and Recommendations Dr. Zeba Sathar - Country Director, Population Council Pakistan (PCP)</td>
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<td>1255 hrs</td>
<td>Q &amp; A</td>
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<td>Concluding remarks by the chair</td>
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<td>1320-1420 hrs</td>
<td>Lunch Break</td>
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## SESSION III: FOOD SECURITY

**Chair:** Mr. Javed Jabbar - Former Senator and Federal Minister

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<th>Time</th>
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<tr>
<td>1420 hrs</td>
<td>Factors contributing to Growing Food Insecurity in Pakistan Mr. Basharat Ahmed Saeed - Water Resources Specialist, World Bank (WB) Pakistan</td>
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<tr>
<td>1435 hrs</td>
<td>The Current State of Pakistan’s Agricultural Economy Dr. Yusuf Zafar - Chairman Pakistan Agricultural Research Council (PARC)</td>
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Honourable Lt. Gen. (R) Nasser Khan Janjua, is the current National Security Advisor of Pakistan. Previously, he served as National Security Advisor of Pakistan (NSA) from October 23, 2015 to July 28, 2017. Lt. Gen. (R) Nasser Khan Janjua, is a retired three star rank army general. He commanded the XII Corps in Quetta and briefly tenured as the President of the National Defence University, Islamabad (NDU) in 2012.

In his last position as Commander Southern Command, he played a vital role, in eradicating extremism, militancy, terrorism and insurgency. In addition to distinguished Command assignments, he has also been, Chief of Staff of a Strike Corps, Director Military Operations, Chief of Staff of Southern Command, and Vice Chief of the General Staff. In recognition of his meritorious services, Chief of Army Staff and Prime Minister of Pakistan have collectively chosen General Nasser Janjua as National Security Advisor.
Ambassador Khalid Mahmood is Chairman Board of Governors & Director General, Institute of Strategic Studies, Islamabad (ISSI). He is also member of the Asian Regional Forum (ARF) Experts and Eminent Persons Group, member Economic Cooperation Organisation (ECO) Eminent Persons Group, President Islamabad Council of World Affairs (ICWA) and Course Director at the Foreign Service Academy, Islamabad.

Ambassador Khalid Mahmood is a former Ambassador of Pakistan to China, Saudi Arabia, Iran, Iraq and Mongolia. He has served as Deputy Permanent Representative of Pakistan to the United Nations, New York and as Additional Secretary at the Ministry of Foreign Affairs, Islamabad. He is also Former Permanent Representative of Pakistan to the Organisation of Islamic Cooperation (OIC) and the Economic Cooperation organisation (ECO) and member UN Peace- Building Fund Advisory Group, New York.

He is a former President of the Institute of Regional Studies Islamabad, ex-President, Association of Former Ambassadors of Pakistan and former member Board of Governors, Islamabad Policy Research Institute (IPRI).

Ms. Romina Khurshid Alam
Parliamentary Secretary for Climate Change
Ms. Romina is a Member National Assembly, and currently serving as the Parliamentary Secretary for Climate Change. Besides that, Ms. Romina is also the Coordinator PM Youth Laptop Scheme, and Media Coordinator Young Parliamentarians Forum. She is also a member of many organizations like Federal Think Tank for Climate Change, Nursing Council; National Institute of Health & Women Caucus. At the international level, she is serving as Convener of Philippines and Singapore, Coordinator of Netherland, Sweden and France Friendship Groups and Ambassador of South Asian Physicians and Surgeons Academy. Her achievements include that of successfully completed National Security Workshop 2015 and National Media Workshop - 5.

Dr. Ghulam Rasul
Director General, Pakistan Meteorological Department (PMD)
Dr. Ghulam Rasul is Permanent Representative of Pakistan with World Meteorological Organization (WMO) and has also served as the Vice-President of the Asia-Pacific Region. Due to keen involvement in research he won SAARC Best Young Scientist Award in 1993 and later the Senior Scientist International Award in 2007.
Mr. Javed Ali Khan
*Country Head, United Nations Habitat Organisation*

Mr. Jawed Ali Khan is an eminent development consultant, with expertise in areas such as climate change, urban development, socio-economic issues, migration, and others. To his credit are numerous milestones including the formation of National Climate Change Policy, National Environment Policy, National Sanitation Policy, National Drinking Water Policy, National Human Settlement Policy, National Sustainable Development Policy (draft). Moreover, he has served as a National Focal Point for UNFCCC, UN-Habitat, UNEP, UNCSD and UNESCAP for more than ten years and has represented Pakistan at various international and national technical expert groups and committees.

**Dr. Abid Qayyum Suleri**
*Executive Director, Sustainable Development Policy Institute (SDPI)*

Dr. Abid Qayyum Suleri is the member of different policy making forums/advisory boards, including National Economic Advisory Council; National Advisory Committee of Planning Commission of Pakistan; Climate Change Commission formed by Lahore High Court to ensure implementation of National Climate Change Policy; and Education Testing Council of Higher Education Commission of Pakistan, among others.

**Mrs. Saira Afzal Tarar**
*(Session Chair)*
*Federal Minister for National Health Services, Regulations and Coordination (MNHSRC)*

Mrs. Saira Afzal Tarar is Federal Minister for National Health Services, Regulations and Coordination in the Federal Government of Pakistan. Hailing from a well-known political family of Pakistan’s largest province Punjab, she is a seasoned parliamentarian having been elected twice to the National Assembly (2008-2013 and 2013-2018).

**Dr. Asma Hyder Baloch**
*Member Social Sector and Devolution, Ministry of Planning, Development and Reforms (MPDR)*

Dr. Baloch is a Member Social Sector at Ministry of Planning, Development and Reforms. She has an extensive experience in research, academia and public sector. She served as an Associate Professor at Institute of Business Administration, Karachi (IBA), National University of Sciences & Technology, Islamabad (NUST) and as an Assistant Professor at Karachi School of Business and Leadership. She received J. William Fulbright Award for International Understanding, Distinguished Faculty Award and Mega IT Fund Award. She was also a Research Fellow at University of Sussex, the London School of Economics and Political Science and University of Pennsylvania.

**SESSION 2:**
*Population Explosion*
Ms. Puruesh Chaudhary is a futures researcher and strategic narrative professional. She has been a Distinguished Fellow at the Institute of Strategic Studies Islamabad (ISSI). Her work mostly involves futures research, knowledge-collaborations and content intelligence within the framework of human security. She has worked with multilateral donors and aid agencies, news organizations and multinationals in advancing development efforts in Pakistan. She has a professional master’s degree in International Negotiation and Policymaking from Institute De Hautes Études Internationales Et Du Développement, Geneva.

Dr. Zeba Sathar directs the Population Council’s office in Islamabad, Pakistan, overseeing technical assistance and capacity building, social science research, and population and demographic dividend research that informs national policy discussions and developments. She also represents the Council through advisory meetings with government officials in Pakistan. She attained her PhD in Medical Demography from London School of Hygiene and Tropical Medicine in 1982. She has contributed to more than 22 books and has about 42 publications to her name.

Mr. Javed Jabbar is a former Senator and Federal Minister of Pakistan, he takes an active interest in diverse fields including international affairs, voluntary work for rural and urban development, the environment, social issues and mass media. As Federal Minister, he has drafted several progressive laws and policies for development and reform in different fields, including the PEMRA Ordinance 2000-2002. The Human Rights Society of Pakistan presented him with a Gold Medal in May 2008 for outstanding voluntary public service.

Mr. Basharat Ahmed Saeed works at World Bank Pakistan as Water Resources Specialist. Before joining WB, he has served at LEAD Pakistan as a Team Lead towards Vision 2047. He has also under taken professional research and project management assignments with many renowned organisations such as Lahore University of Management Sciences (LUMS), Princeton University, International Growth Centre and Government of Azad State of Jammu and Kashmir (AJK) in his diverse career of more than 6 years., Mr. Basharat received his master degree in International Relations from the University of Sussex and an undergraduate degree with honors from LUMS. He has also attended the prestigious Oxford Adaptation Academy in 2014.
Dr. Yusuf Zafar  
*Chairman, Pakistan Agricultural Research Council (PARC)*

Dr. Zafar is a prominent internationally renowned Pakistani scientist having over 35 years of experience in Agri-biotechnology research in Pakistan. Prior to joining PARC he was serving in International Atomic Energy Agency (IAEA), Vienna. He has also served as Minister (Technical) Permanent Mission of Pakistan to the IAEA Vienna from 2012-2014. He attained his PhD in Bio Sciences from Quaid-i-Azam University Islamabad, Hanover University Germany. He has over 200 research publications in scientific papers in national and international journals including books.

Dr. Iqrar Ahmad Khan  
*Vice Chancellor, University of Agriculture, Faisalabad (UAF)*

Dr. Iqrar has an extensive and diverse experience in academia, research and administration. Currently, he is Vice Chancellor, University of Agriculture, Faisalabad. He has been assigned an additional charge of Vice Chancellor Office, Muhammad Nawaz Sharif University of Agriculture (MNSUA), Multan. He attained his PhD from the University of California, Riverside, US. He was instrumental in developing regional/international mango research program and discovering new varieties of wheat. He is also an author of hundreds of publications which include five books and several book chapters.

**SESSION 4:**  
*Water Security*

**Lt. Gen. (R) Muzammil Hussain**  
*(Session Chair)*  
*Chairman, Water and Power Development Authority (WAPDA)*

General Hussain has assumed the charge as Chairman WAPDA on August 24, 2016. He joined Pakistan Army in 1976 and graduated with distinction from Pakistan Military Academy (PMA). He underwent his grooming in an Infantry Battalion. He has been employed on exalted positions in Interior Sindh and Gulf War - 1 in Saudi Arabia. He also attended different courses in France and Indonesia. He served as Defence Attache in Jakarta, instructor in Army Command and Staff College, Quetta and Chief Instructor as a brigadier. He commanded an Infantry brigade, prestigious Force Command Northern Areas (FCNA) Division in Gilgit Baltistan and 30 Corps Gujranwala.

**Dr. Qamar Uz Zaman Chaudhry**  
*International Climate Change Specialist, Asian Development Bank (ADB)*

Dr. Chaudhry is a climate scientist and associated with the UN-World Meteorological Organisation, first as a Member of Executive Council and then Vice President of the Asia Region since 2003. He is currently working with ADB as International climate Change Specialist. He is the lead author of Pakistan’s first National Climate Change Policy, 2012 and the Framework for Implementation of Climate Change Policy (2014 – 2030). He has contributed to more than 60 research papers in national and international journals, conferences and forums.
Mr. Ahmer Bilal Soofi

President, Research Society of International Law (RSIL)

Mr. Soofi is founding President of the RSIL and the Senior Partner of well-reputed law firm ABS & Co. He served as Federal Minister for Law and Justice, Parliamentary Affairs and Human Rights, in the caretaker government in 2013. He represents Pakistan as an expert in matters of international law and provides legal counsel before the International Court of Justice (ICJ) and International Centre for Settlement of Investment Disputes (ICSID). He was elected as a Member Advisory Council of United Nations Human Rights Council for three years (2011 – 2014).

Dr. Khalid Mohtadullah

Senior Advisor, Global Water Partnership (GWP)

Mr. Mohtadullah is a civil engineer with vast experience in water resources policy, strategy, institutional development, planning, project preparation, research, implementation and management. He possesses an advanced degree and diploma in engineering and management from Massachusetts Institute of Technology (MIT), USA and the Harvard Business School, (HBS) USA respectively. He retired as Managing Director and Member WAPDA. He remained Director of Research and Deputy Director General at International Water Management Institute (IWMI). He has served as the Executive Secretary of GWP in Stockholm, Sweden.