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Organization of the
United Nations

Accelerating progress towards SDG2

POLICY EFFECTIVENESS ANALYSIS

PAKISTAN



Accelerating progress towards SDG 2

Policy effectiveness analysis

PAKISTAN

Food and Agriculture Organization of the United Nations

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Abbreviations and acronyms

AAP	Accelerated Action Plan for the Reduction of Stunting and Malnutrition
ACIAR	Australian Centre for International Agricultural Research Institute
ADB	Asian Development Bank
AJK	Azad Jammu Kashmir
BSIP	Benazir Income Support Programme
CFS	Committee on World Food Security
CPF	Country Programming Framework
DA	Agriculture, Supply & Prices Department
DF	Food Department
DFC	Forestry & Conservation Department
DI	Irrigation Department
DLF	Livestock & Fisheries Department
EU	European Union
EUD	Delegation of the European Union to Pakistan
FAO	Food and Agriculture Organization
FAOR	FAO Representative in Pakistan
FIES	Food Insecurity Experience Scale
FIRST	Food and Nutrition Security Impact, Resilience, Sustainability and Transformation
FNSSA	Food and Nutrition Security and Sustainable Agriculture
FSN	Food Security and Nutrition
GB	Gilgit- Baltistan
GII	Gender Inequality Index
GOP	Government of Pakistan
HDI	Human Development Index
IFPRI	International Food Policy Research Institute
ILTS	Improved Land Tenancy in Sindh project
INSS	Inter-sectoral Nutrition Strategy for Sindh
IPC	Integrated Food Security Phase Classification
MNSFR	Ministry of National Food Security and Research
MPDR	Ministry of Planning, Development and Reform
NAEP	National Agriculture Emergency Programme
NDC	Natural Disaster Consortium

NDMA	National Disaster Management Authority
NFSP	National Food Security Policy
NGO	Non-government organisation
NWP	National Water Policy
P&D	Planning & Development Department
PBS	Pakistan Bureau of Statistics
PDMA	Provincial Disaster Management Authority
PML-N	Pakistan Muslim League - Nawaz
POU	Prevalence of Undernourishment
PPP	Pakistan People’s Party
PRS	Poverty Reduction Strategy
PSLM	Pakistan Social and Living Standards Measurement
PTI	Pakistan Tehreek-e-Insaaf
SAGP	Sindh Agriculture Growth Project
SAP	Sindh Agriculture Policy 2018-30
SDG	Sustainable Development Goal
SOFI	State of Food Security and Nutrition in the World
SUN	Scaling Up Nutrition movement
UNDP	United Nations Development Programme
VGGT	Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security
WFP	World Food Programme

Introduction

The Food and Nutrition Security Impact, Resilience, Sustainability and Transformation (FIRST) Programme represents a partnership between the Food and Agriculture Organization of the United Nations (FAO) and the European Union (EU).¹ In 2018, the partnership agreed on the need to have a policy effectiveness analysis conducted in most of the FIRST countries. This analysis aimed to provide some useful answers to the following common questions about international development investment in food security, nutrition and sustainable agriculture (FNSSA):

- What may hamper the achievement of the Sustainable Development Goal (SDG) 2 targets for FNSSA?
- Are we supporting the right set of actions, at the right moment, in the right places, for the right groups of people?
- Are we having or are we likely to have a real impact on the right group of people?
- What are realistic, feasible areas for allocating scarce public sector resources?
- What areas have or can be expected to give the greatest impact?
- What are the most efficient ways of implementing those actions?

As policy implementation rather than formulation is repeatedly raised as one of Pakistan's challenges, this assessment considered the implementation challenges of specific policy processes relevant to the FAO-EU partnership in the country, rather than the entire suite of relevant policies. It considered the necessary conditions to move forward and how best to meet these conditions, including through more strategic resource allocation and more effective approaches to building institutional capacity.

Pakistanis voted for both federal and provincial elected representatives in July 2018, according to the five-year electoral cycle. Election issues in 2018 centred on governance and accountability, and also on poverty, jobs, infrastructure, access to the basic services necessary for both human and economic development, and the agriculture 'emergency'. Additionally, there was a very strong topical interest in water resource management, driven by the strained water delivery system, drought conditions, ever-increasing population and the interest taken by the judiciary in that issue.

The former government led by the Pakistan Muslim League – Nawaz (PML-N) had prepared for the election campaign by finalizing certain policies and reviving programme commitments promised in prior planning documents such as Vision 2025 and the Eleventh 5-year Plan 2013-2018 (MPDR, 2014). Ahead of the July 2018 election the 2018 National Food Security Policy (NFSP) and its embedded National Zero Hunger Programme (NZHP) were formally adopted, as well as a new 2018 National Water Policy (NWP). Within the previous two years the 2017 National Climate Change Policy (NCCP) was also adopted and the Seed Amendment Act 2015 was passed. Provincial governments such as that of Sindh similarly adopted some new policies in 2017–2018 in the FNSSA subject areas, including agriculture, livestock and forestry. Provinces including Balochistan and Khyber-Pakhtunkhwa had dormant policies that required re-assessment and implementation, in the context of the national policies mentioned.

Following the July 2018 election there was a change of federal government. The new Pakistan Tehreek-e-Insaaf (PTI) government led by Prime Minister Imran Khan initially continued existing national programmes and policies relating to FNSSA. Its election commitment document, entitled "Imran Khan's first 100 Days Agenda", and corresponding scorecard after 100 days, included the announcement of a new National Agriculture Emergency Programme (NAEP) as well as a focus on

¹ For more information about this global programme, please see: www.fao.org/europeanunion/eu-projects/first/en/

social services and governance, and subsequently in 2019, it announced a new poverty alleviation programme, *Ehsaas*, which included some FNSSA measures. In Sindh, the pre-election government was led by the Pakistan People’s Party (PPP), which was returned to office, and continues its existing policies and programmes. In Punjab the PTI formed a government and also retained the government in Khyber Pakhtunkhwa, while in Balochistan the newly formed Balochistan Awami Party took office.

The FAO-EU partnership in Pakistan is focused on Sindh province. It has previously agreed that the implementation of both the NZHP and the NFSP, in particular the implementation of these by provincial government, are key processes for inclusion in this analysis in view of their importance to both the FAO Country Programming Framework (CPF) and the EU investments in Pakistan’s development. However, in accordance with the partnership’s focus, the Sindh Agriculture Policy 2018-2030 (SAP) and its implementation process have been considered in greatest detail.



Methodology

The FIRST Policy Effectiveness Analysis in each concerned country followed a set of eight Guiding Questions (Table 1) common to the global FIRST Programme, which were answered in an iterative manner. This means that the focus progressively narrowed to a limited set of policies deemed relevant for the analysis.

TABLE 1. GUIDING QUESTIONS

Guiding Questions: 2018 FIRST Policy Effectiveness Analysis	
1	What are the trends, geographical and socio-economic patterns, and prospects for eradicating food insecurity, malnutrition and poverty in the country? What are the key drivers of food insecurity, malnutrition and poverty?
2	Is the current set of policies and strategies sufficiently focused and well-designed to adequately address these immediate and underlying causes of food insecurity and malnutrition in the most impactful way at a national scale and at the level of specific socio-economic groups, geographic areas, agro-ecological zones and/or administrative areas that are facing stubborn or more pervasive problems of food insecurity and malnutrition?
3	Are current policies and strategies sufficiently forward looking to also address the food security and nutrition impacts of emerging problems related to, for example, migration, youth unemployment, climate change, population growth, urbanization, etc.?
4	Are the implementation mechanisms and capacities that are in place adequate to reach specifically those people and areas most affected by food insecurity and malnutrition?
5	To what extent are the existing policies and strategies adequately resourced (from national resources and other sources), implemented, monitored and, in case of inadequate or incomplete implementation, what are the implications for the achievement of the intended food security and nutrition impacts?
6	What are the political economy factors that may prevent the adoption and/or implementation of the right set of measures, actions, and implementation mechanisms to eradicate hunger, food insecurity and malnutrition by 2030?
7	Considering the above analysis, what is the realism/credibility of the current set of policies and strategies?
8	Considering the above analysis and given a scenario of continued resource and capacity constraints, what areas of the policy framework and what implementation capacity gaps should be prioritized for resource allocation?

The methodology for answering the questions in Table 1 was flexible, according to the requirements of each country, but was suggested to include focus group discussions, consultative workshops, key informant interviews and literature reviews. The global FIRST Programme intends to use the information from each country report to compile a global report, so the readership was assumed to include international, national and provincial stakeholders, particularly those with capacity to invest or participate in further policy-related interventions.

In Pakistan, the steps followed in preparation of this report were as follows:

1. An annotated outline was prepared and approved by the FAO Representative in Pakistan (FAOR) and the Delegation of the EU to Pakistan (EUD). Feedback was received from FAO headquarters. The FIRST Programme also issued global guidance notes for several of the eight questions.
2. A limited desk review was conducted of existing policies, programme documents, reports on FNSSA situation in Sindh and Pakistan overall, focusing on a subset of policies of interest. This has been the main source of information for compiling the report.
3. Four focus group discussions of four to nine participants were held in Hyderabad, Karachi and Islamabad. This produced a rich and informative topic base and understanding of perceptions about structural issues in FNSSA in Sindh and Pakistan.
4. As a tool for engagement of a wider audience, to gather more views and opinions, a questionnaire was also designed, based on the eight Guiding Questions in Table 1.
 - a. This questionnaire was not intended to be a comprehensive survey, but rather a supplement to the key informant interviews, focus groups and consultative workshops. Where participants were asked open questions, the questionnaire suggested multiple options based on the literature review. Respondents were able to choose to rank as many options as they wanted for these open questions, and had the opportunity to provide additional information in written form. Respondents were also able to choose not to answer questions, either closed or open, if they wanted.
 - b. Ninety-four of the written questionnaires were distributed in hard copy and collected at FIRST-hosted workshop and training events in Sindh, producing a response of 61; most of the respondents were government officials who were receiving training on policy action planning. An electronic version of the questionnaire was developed and distributed by e-mail using Survey Monkey (a commercial online survey service) to 249 targeted individuals, national and international, drawn from government, non-government organizations, the private sector, academia and independent consultants, giving a response of 39. Thus the total number of respondents was 100.
 - c. Highlights of the results of the questionnaire are presented in this report in boxes to emphasize that they rely on a limited sample size and do not represent a comprehensive survey. Rather, they are presented for interest and to indicate areas where more detailed analysis could be undertaken in the future.
5. Key informant interviews were conducted for the Sindh context by the FIRST policy consultant and an international FAO food security policy consultant. For the federal context these were conducted by the international FAO food security policy consultant. About 12 individual face-to-face interviews have been completed to date with key figures in government, the UN and non-government organizations.
6. A first draft of the report was prepared, drawing on the literature review, information from the questionnaire, a limited set of interviews and the focus groups. This report contained a synthesis of the main findings from all sources, including a simple analysis of the questionnaire results, taking into account the small sample size.
7. Consultative/validation workshops were held in Hyderabad, Karachi and Islamabad. Invitations were issued to a range of government, UN, academic, civil society and non-government organizations working in the FNSSA, including prior focus group invitees, prior FIRST training workshop invitees and prior key informants. At these workshops, the main findings contained in the first draft were presented and discussed interactively, and included simple analyses of the questionnaire results.

8. The second draft of the report was prepared based on feedback from the FAOR, the EUD and the consultative/validation workshops. It contained some new information in addition to infographics developed to illustrate the questionnaire results better. This draft was reviewed by internal international technical experts at FAO. Further literature sources were then consulted to support the analysis and produce the final version.
9. The questions posed to the focus groups were based on the Guiding Questions in Table 1, included in Annex A. Similarly, the written questionnaire used at workshops and distributed in an online version by e-mail was also based on the Guiding Questions in Table 1, and Annex B. The list of organizations consulted via the focus groups, questionnaire tools, key informant interviews, and consultative/validation workshops is in Annex C, including the gender breakdown of these sources.



1. Geographic trends and socio-economic patterns in Pakistan, and current drivers of food insecurity, malnutrition and poverty

What are the trends, geographical and socio-economic patterns, and prospects for eradicating food insecurity, malnutrition and poverty in the country? What are the key drivers of food insecurity, malnutrition and poverty?

1.1 A large, multi-ethnic, growing and young population at a central, food trade-positive location, that commonly works in agriculture, but has poor literacy

Pakistan is a populous country strategically located, from a food trade point of view, between China, India, Central Asia and the Middle East. Many different ethno-language groups constitute the population, each with its own characteristics, including dietary preferences.²

The government's Sixth Population Census in 2017 estimated it to include 207 million people,³ growing at 2.4 percent between 1998 and 2017. This is linked to a fertility rate that is declining but was still 3.3 children per woman in the period 2010–2015 (UNFPA, 2019). It is the sixth most populous country in the world, with a marked youth bulge (35 percent under 15 years, and 29 percent between the ages of 15 and 29).

Hence, Pakistan has a potential youth dividend, but only if key socio-economic development factors are addressed, the food production and distribution system can keep pace, and attention is given to good population planning. The skills, training and job options for this large population are a weak point. Literacy remains at 58 percent in Pakistan (42 percent illiteracy), according to the 2015–2016 Pakistan Economic Survey figures.⁴

Low literacy levels of mothers, in particular, have been clearly linked with malnutrition, through their effect on infant and young child feeding practices. Agriculture remains a dominant employer, occupying approximately 47 percent of the labour force, or 24 million people.

Therefore, while it is no longer the backbone of the Pakistan economy, agriculture remains a key tool for rural poverty reduction, including by addressing informality in the female agriculture workforce (see also Section 3.5).

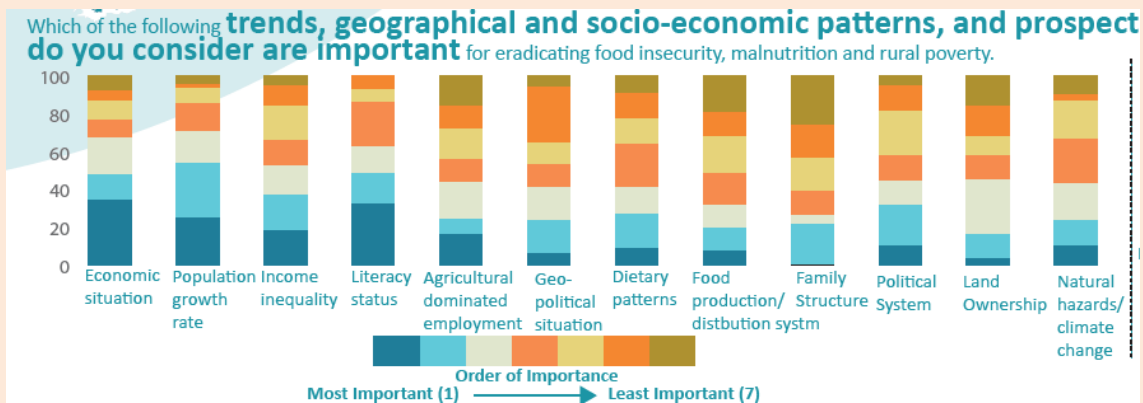
² Dietary preferences also vary among the main religions found in Pakistan, which are Islam, Hinduism and Christianity. In Sindh, Muslims constitute about 92 percent of the population while Hindus constitute eight percent. However, in the border districts of Umerkot and Tharparkar, which rely on rainfed agriculture and are affected by periodic droughts, Hindus comprise over 40 percent of the population.

³ This figure does not include the autonomous regions of Gilgit-Baltistan (GB) and Azad Jammu Kashmir (AJK).

⁴ Because of the 2017 Population and Housing Census, the Pakistan Social and Living Standards Measurement (PSLM) was not carried out for 2017–2018. Therefore, the Pakistan Economic Survey says that the figures for 2015–2016 should be considered for the current year in addition. According to the Pakistan Economic Survey 2017–2018, the literacy rate for all Pakistan, including ten-year olds and above, is 58 percent.

BOX 1: POPULATION GROWTH, LITERACY, AGRICULTURE-DOMINATED EMPLOYMENT

Of those respondents who ranked “population growth rate”, 57 percent thought of it as either the first or second most important factor to deal with in eradicating food insecurity, malnutrition and rural poverty in Pakistan, while 44 percent of respondents who ranked “literacy” thought it to be either the first or second most important factor. Only 14 percent of those who ranked “agriculture dominated employment” thought it to be the first or second most important factor.



1.2 A geographically diverse country highly vulnerable to climate change

Pakistan extends over 796 000 km², with highly diverse climatic and agroecological zones (AEZ) ⁵ It has experienced large-scale natural disasters in the previous two decades, including the 2005 Kashmir Earthquake, 2010 and 2011 floods, and severe and extended droughts from 2013 to 2018, with dire consequences for rural livelihoods, livestock and agriculture. Pakistan was ranked eighth (between Bangladesh and Vietnam) on the 2019 Global Long Term Climate Risk Index published by German Watch (Eckstein, D. *et al*, 2018).

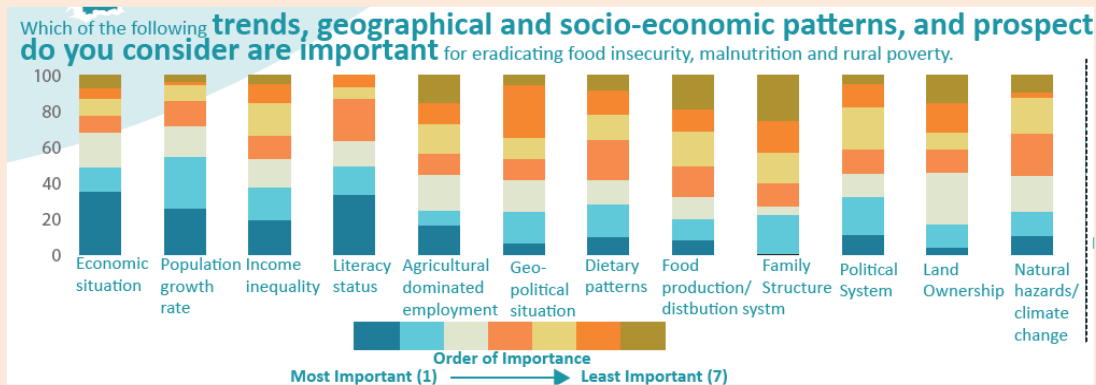
The Asian Development Bank’s (ADB) Climate Change Profile of Pakistan (Chaudry, Q., 2017)⁶ notes that climate changes will have wide-ranging future impacts, including reduced agricultural productivity, increased frequency of natural disasters, and higher variability of water availability. Even if institutional capacity to deliver disaster risk reduction, response and management is fully strengthened, it will not change Pakistan’s susceptibility to what is a global phenomenon whose impact may depend on other countries’ actions. Therefore, adaptation via the uptake of climate-resilient agricultural practices in Pakistan is one of the most important areas for attention of government and development partners, as is climate-resilient water management (see Section 1.2 below). The vulnerability of different livelihood groups to shocks has been examined in detail (PPAF/SDPI, 2016) to determine which geographic areas are more at risk; this may be usefully drawn on in disaster response management design.

⁵ Agro-Ecological Zoning refers to the division of land area into smaller resource mapping units, each having a distinctive combination of climate, landform, soils and land cover, with specific ranges of potentials and constraints for using agricultural land.

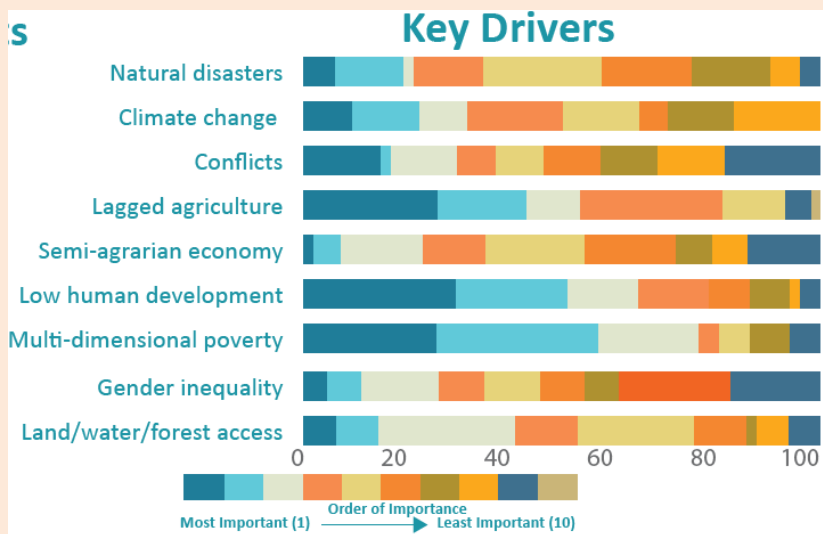
⁶ The World Bank also produced a Climate Smart Agriculture Profile for Pakistan in 2017, facilitated by FAO.

BOX 2: NATURAL DISASTERS AND CLIMATE CHANGE

Out of those respondents who ranked “capacity to deal with natural hazards and climate change”, 14 percent thought of it as either the first or second most important factor to deal with in eradicating food insecurity, malnutrition and rural poverty in Pakistan.



Twenty percent of respondents who ranked “natural disasters”, and 23 percent who ranked “climate change” thought it was either the first or second key driver of food insecurity, malnutrition and poverty in Pakistan in the last five to seven years.



1.3 Food production

Food production depends on best use of the world’s largest, but ageing, irrigation system for which the water supply is threatened by climate change. Agriculture consumes roughly 90 percent of Pakistan’s fresh water supplies. Food production has a high dependence on the transboundary Indus Basin, which covers 65 percent of Pakistan, including all of Punjab and Khyber Pakhtunkhwa provinces, most of Sindh and the eastern part of Balochistan.⁷ The Indus River irrigation system accounts for 95 percent of the country’s total irrigation and produces over 90 percent of the country’s food supply. However, water allocation and access, and distribution tensions and disputes, mean that rural incomes

⁷ The Indus River and tributaries also flow through the autonomous region of Gilgit-Baltistan, where mountainous communities maintain a food system.

and food security are not assured. Transformation of irrigation to an integrated water resource management system and much better on-farm water use efficiency have been highlighted by FAO, World Bank and ADB as necessary for Pakistan, not only to cope with its growing population's income and food needs, but also to respond to climate change and the address the water–food security nexus.

Modelling of climate change scenarios for Pakistan by FAO has shown that if agriculture and water management in the Indus Basin continue a business-as-usual approach, then increasing temperatures and changes in precipitation will pose serious threats to future livelihoods of farmers and Pakistan's agriculture sector. Much of Pakistan's vulnerability to climate change is linked to its high dependence on a single river system, the dominance of four main crops (wheat, cotton, rice and sugarcane), and the overall arid to semi-arid climate. In Sindh province, concerns about this vulnerability are regularly highlighted in the media – several districts at the tail end of the irrigation system are already experiencing higher than average temperatures. In focus groups and the questionnaire, comments including, improper management of water, unfair water distribution and poor governance, were frequently noted as being believed to be among the drivers of food insecurity, malnutrition and poverty.

1.4 Poor governance of land/water tenure

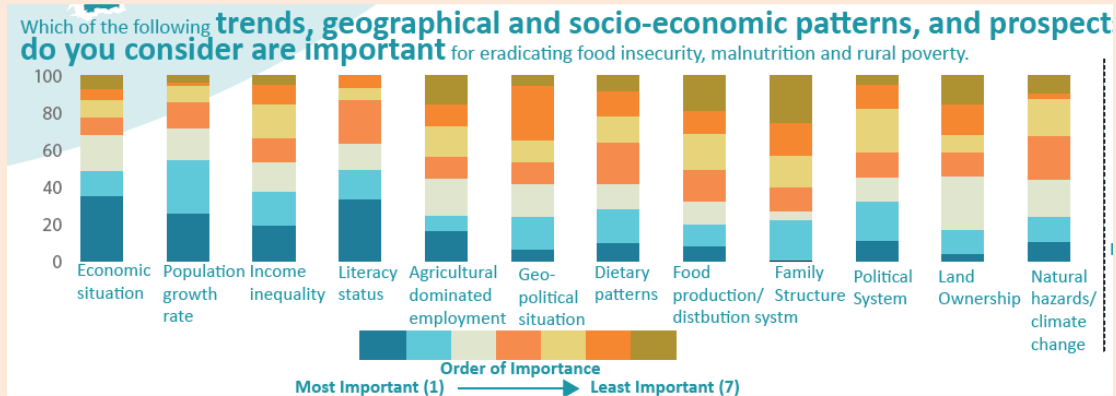
Poor governance of land/water tenure is an unresolved structural issue. Reliable access to arable land and water are fundamental to both food security and the existence of a viable agriculture industry that is based on sustainable, climate-resilient, cost-competitive practices. Notwithstanding the lack of modernization in agricultural production techniques in Pakistan and decreasing acreages among smallholders,⁸ it is the complex and sensitive land tenure governance system, and the practices used in water allocation and distribution, that are often considered paramount in alleviating food insecurity, malnutrition and rural poverty. In Sindh, the position of so-called sharecroppers or *hari* farmers, who are commonly also landless,⁹ in relation to their landlord (or *zamindar*), the intermediary (the *arthi*) and the land registration bureaucrat (the *tapedar*) is recognized as particularly problematic. *Haris* and their families have lower life expectancy, poorer nutritional status, lower literacy and have been more vulnerable to natural disasters. In comparison with other countries, and even other provinces of Pakistan, this system has marked differences from either typical landowner–tenant arrangements or owner–operator subsistence farming, in terms of the risk-and-return set-up, and the balance between inputs and outputs of affected parties. Sharecropper farmers have little incentive or financial means for sustainable land and water use management practices or for initiation of high value endeavours such as fruit orchards or agroforestry.

⁸ For information on landholding characteristics in Pakistan and issues of acreage and ownership, see SJ Malik, S Ali, K Riaz, E Whitney, M Malek and A Waqas, 2016. 'Agriculture, Land and Productivity in Pakistan' in Spielmen *et al.* *Agriculture and the Rural Economy in Pakistan: issues, outlooks and policy priorities*. IFPRI/UUP.

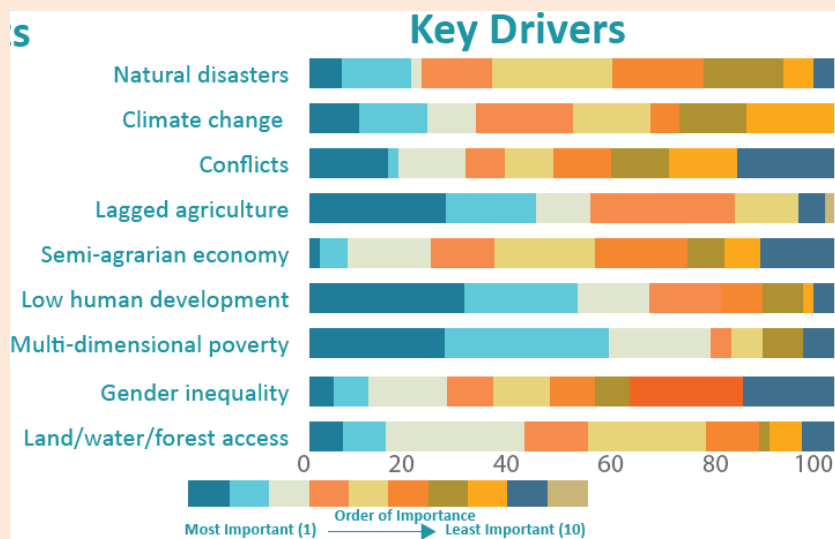
⁹ The situation for landless agricultural labourers (rather than *haris*), particularly women, is further considered elsewhere in this report (Sections 1.6 and 3.5). The broader issue of bonded labour (which also affects *haris*) is not considered in this report. For a discussion see I Hussain, A Qureshi and N Hussain, 2019. *The Economy of Modern Sindh: opportunities lost and lessons for the future*. OUP.

BOX 3: LAND TENURE GOVERNANCE, LAND OWNERSHIP, AND COMPLEXITY OF RELATIONSHIPS BETWEEN LAND OWNERS AND OTHER STAKEHOLDERS

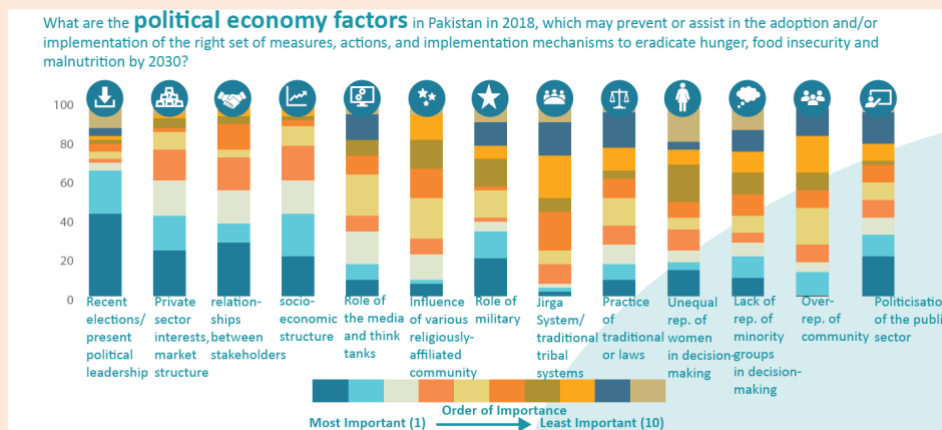
Out of those respondents who ranked “land ownership patterns and acreage size” only 11 percent thought that was the first or second factor in eradicating food insecurity, malnutrition and rural poverty.



Fourteen percent of respondents who ranked “land/water/forest access and tenure governance” gave it as either the first or second key driver of food insecurity, malnutrition and poverty in Pakistan in the last five to seven years, but 27 percent thought it was the third driver (after drivers like “low human development”, “lagged agricultural development”, and “poverty”).



However, 34 percent of those who ranked “complexity of relationships between stakeholders (for example, between landowners/government administrative officials/law enforcement agencies)” thought it was the first or second politico-economic factor that may prevent adoption of the right set of measures to eradicate hunger, food insecurity and malnutrition by 2030, while 40 percent thought this to be the case for “private sector interests, market structure, and industry/land ownership realities”.



1.5 A lower middle-income country with continued social inequality and not so easy business

Pakistan reached lower middle income country status in 2008. It is quite rich in natural and mineral resources. Agriculture still contributes around one fifth of GDP, down from around two fifths in the 1960s. However, Pakistan does not generally have a good enabling environment to grow its agriculture and food industries. The legal and administrative framework to support government efforts to gather tax revenue (from asset owners, income earners and service users, for redistribution and investment in public goods), is quite good, but tax avoidance behaviours and usage of the informal economy are relatively high. The World Bank recently (2019) ranked Pakistan 136 out of 190 countries for ease of doing business. The Gini¹⁰ index for Pakistan, which is a measure of inequality, reached 33.5 in 2015, and has tended to hover around 31.0 in the period 1987–2015 (World Bank, 2019).

Poverty levels have historically been very much correlated with food insecurity levels in Pakistan. Although poverty is slowly coming down from earlier times, the experience of lack of income, assets and access to basic services in Pakistan, or multi-dimensional poverty (MDP), is widely considered a major driver of food insecurity and a key contributor to malnutrition, because it limits capacity of households and individuals to acquire adequate and nutritious food, and then sufficiently utilize it. In 2016, 38 percent of Pakistanis were experiencing MDP (MPDR/UNDP, 2016)¹¹. Of particular concern is the affordability of a nutritious diet in Pakistan,¹² in comparison with the low wages, large family sizes,

¹⁰ The Gini index measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution. Thus a Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality.

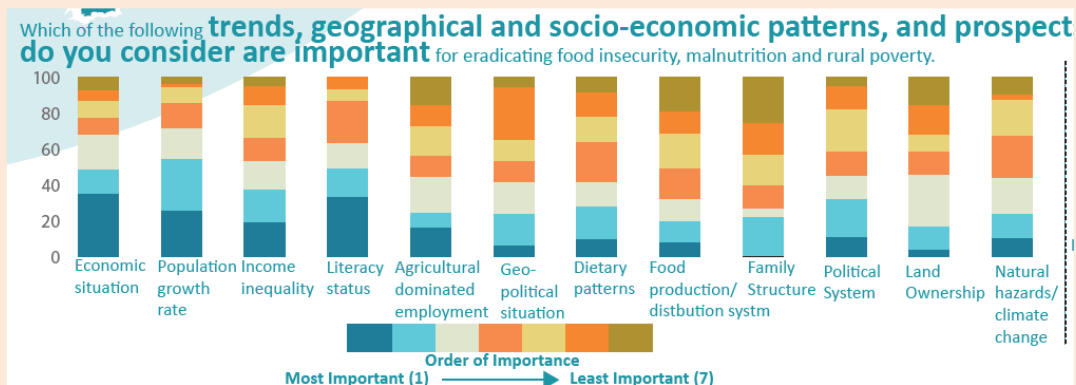
¹¹ MDP is a composite that incorporates not only income and assets but access to essential services including education and health care and is derived from the data in the Pakistan Social and Living Standards Measurements (PLSM) Survey.

¹² For the minimum cost of a nutritious diet in Pakistan, see: MDPDR Planning Commission & WFP. 2016. *Minimum Cost of Diet*.

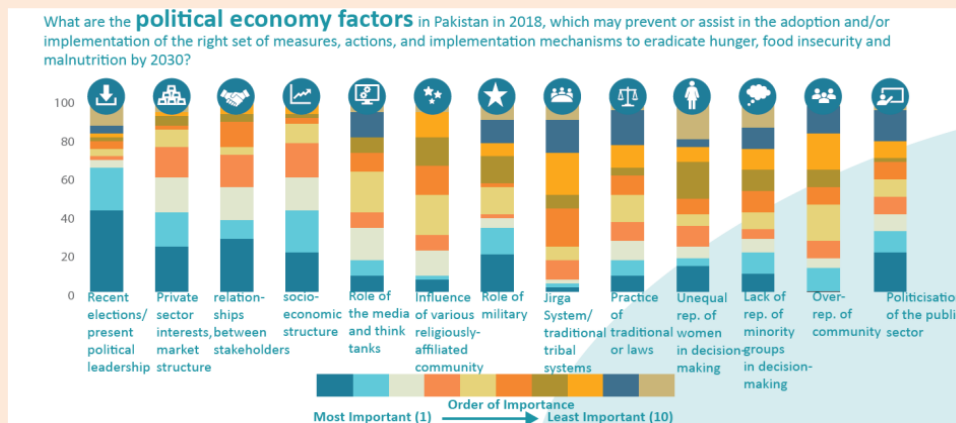
and also low levels of farming diversification (which limits dietary diversity for subsistence farmers who may be concentrating on cash crops/products like wheat or milk). A large proportion of development sector work in Pakistan appears aimed at short- to medium-term alleviation of poverty and its consequences, nutritional and otherwise (see Section 2).

BOX 4: SOCIO-ECONOMIC INEQUALITY AND STRATIFICATION

Forty-two percent of respondents who ranked “economic situation” gave it as either the first or second most important factor to be dealt with in eradicating food insecurity, malnutrition and rural poverty in Pakistan, while 30 percent who ranked “income inequality” gave it as either the first or second most important factor.

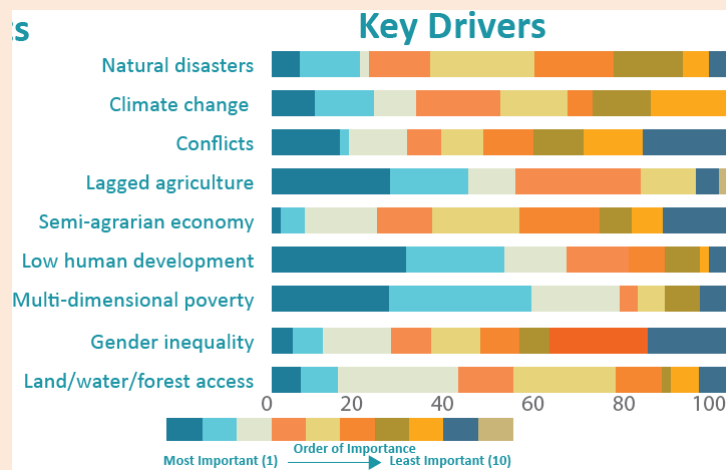


Forty percent of those who ranked “the present socio-economic class structure” thought it was the first or second politico-economic factor that may prevent adoption of the right set of measures to eradicate hunger, food insecurity and malnutrition by 2030.



BOX 5: MULTI-DIMENSIONAL POVERTY

Fifty-eight percent of those who ranked “multi-dimensional poverty” thought it was the first or second key driver of food insecurity, malnutrition and poverty in Pakistan in the last five to seven years (this was the driver with the highest ranking out of all the drivers suggested in the questionnaire).



Sadly, malnutrition in Pakistan contributes to ongoing poverty, through the vicious cycle of its impact on healthcare costs, infant mortality, reduced capacity to benefit from schooling, and reduced economic output by the adult labour force. In a report released in 2017 by the SUN Secretariat of the MPDR with WFP, these economic losses attributable to malnutrition added up to be US\$7.6 billion a year, or three percent of Pakistan’s GDP (MPDR/WFP, 2017). This report was based on data from the 2011 National Nutrition Survey (NNS) and the 2012–2013 Pakistan Demographic and Health Survey (PDHS).

1.6 Poor human development results, especially with regard to gender

The Constitution of the Islamic Republic of Pakistan, including the 18th amendment, guarantees many rights that when implemented, will be important in the effective eradication of not only poverty, but also of hunger and malnutrition. An example is the right to free and compulsory education until the age of sixteen. Another is that the state shall provide food to those temporarily unable to earn a livelihood (Article 38) – this is known as ‘Right to Food’. Although laws have been enacted in many jurisdictions to realize these rights, for various reasons they are not fully implemented, enforced, funded, understood or accepted by the whole community. For example, the law restraining child marriages below the age of sixteen (and recently in Sindh, eighteen) is widely ignored in rural areas. Similarly, labour laws appear to miss many female agriculture labourers who are not captured in formal employment provisions (even the much-lauded 2018 Home-based Workers Act of Sindh does not cover agricultural workers). Overall, Pakistan has only made sufficient progress to reach a Human Development Index (HDI) of 0.562 (UNDP, 2017) and a ranking of 150 out of 189 countries, putting it in the medium category.

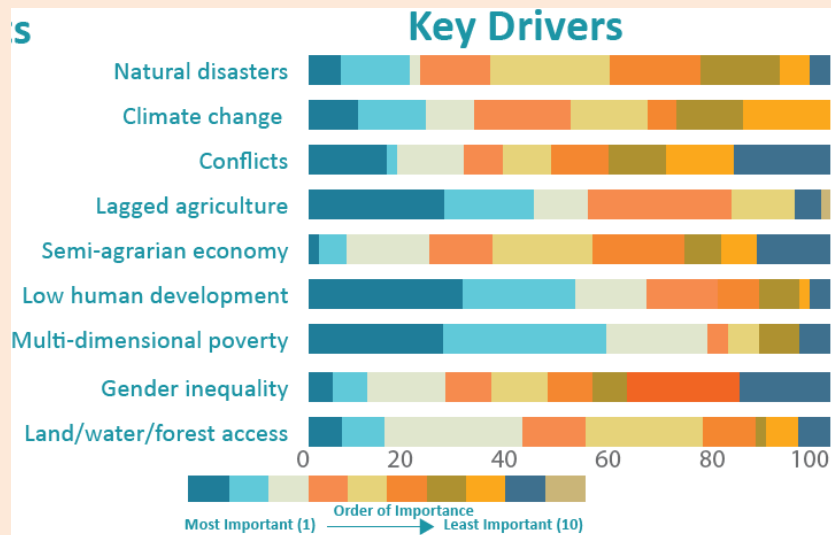
Gender inequality is high and persistent in Pakistan. There are marked differences by gender in school attendance, literacy, labour force participation, wages, land ownership, access to economically

productive resources, and representation in decision-making roles such as in parliamentary seats, senior government administration, the judiciary and other spheres. In 2017 UNDP reported Pakistan's Gender Inequality Index (GII) to be 0.541, with a ranking of 133 in the world. Contributing to this score are a maternal mortality rate of 596 per 100 000 births, adolescent birth rate (births by girls aged 15–19) of 36.9 per 1000 births, secondary education rate of 27 percent for females compared with 47.2 percent for males, labour force participation of 24.9 percent for females compared with 82.7 percent for males (the lowest in South Asia), and female parliamentary representation rate of 20 percent of seats. Nationally, literacy of females is at 48 percent compared with 70 percent for males, but it is much lower in rural areas (the literacy rate for women in rural Sindh is just 21 percent, for example). In 2013–2014 the wage gap between men and women in Pakistan was 39 percent, and in agriculture (weeding, sowing, harvesting, applying manure, threshing and care of livestock) it was over 50 percent (PBS, 2015). The Rural Women in Pakistan Status Report 2018 (Zaidi Y. *et al.*, 2018) notes that 96 percent of rural Pakistani women do not own any land, only two percent have sole ownership, and two percent have joint ownership.

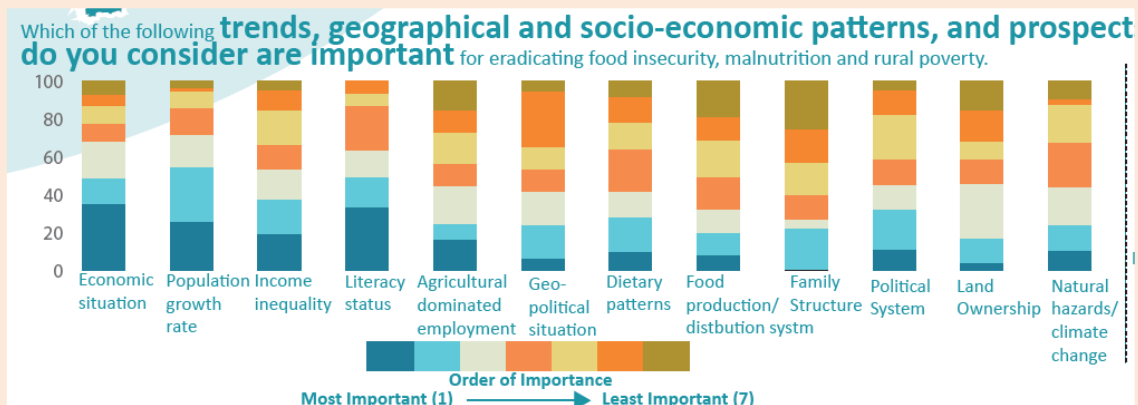
The case for improving gender equality is clear from its relationship with poverty and development. In industrialized and developed countries alike, high gender equality is associated with lower poverty and a higher rank on the HDI. This occurs through women's ability to contribute to household income, influence household expenditure on food and children's needs, and gain access to productive resources of credit, land, inputs and technologies. However, in rural Pakistan, a complex set of traditions continues to challenge the attainment of women's empowerment, undermining the potential gains from equality. These are: low female mobility (permission often required to go out of the village or field unaccompanied, and visit places such as markets, banks, educational institutions or political meetings); a reduced decision-making role with respect to large purchases (including transfer of land), contraception, children's education, and marriages; joint family living arrangements that constrain individual choice; burden of unpaid domestic tasks that restricts time available for productive work; and lack of recognition of the value of women's work, especially in livestock management (activities such as watering animals, milking, collecting eggs, cleaning animal sheds, grazing and feeding animals, preparing ghee and preparing dung cakes) (Ahmad, N. *et al.*, 2016) (Jamali K., *et al.*, 2015). Ahmad *et al.* (2016) point out that in this context, social protection and rural education programmes may not always show the desired results for food security. Rather, investment in rural enterprise development for women, such as in livestock or horticulture businesses, and in efforts to change Pakistani social and cultural norms, may both be more successful.

BOX 6: HUMAN DEVELOPMENT AND GENDER INEQUALITY

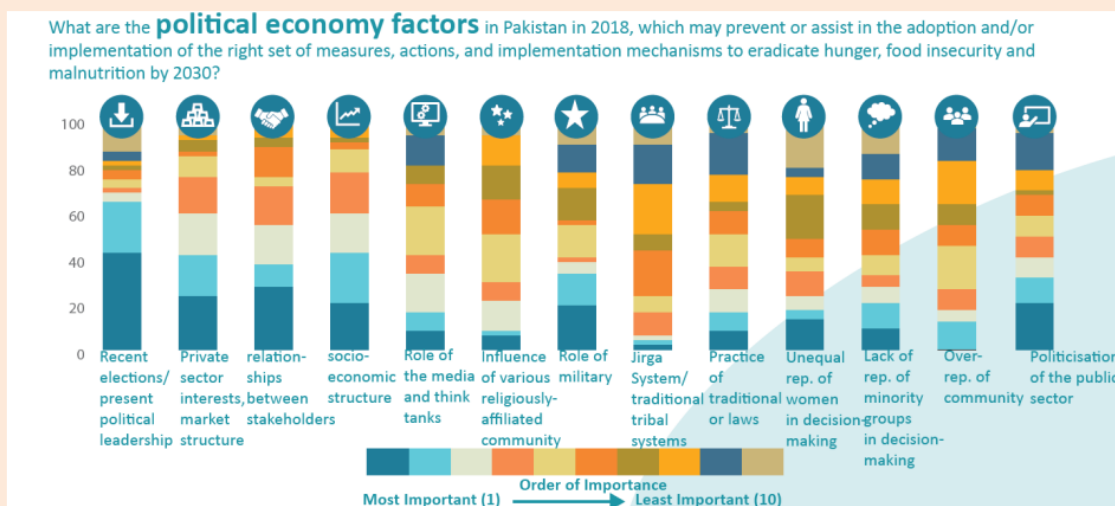
Fifty-two percent of respondents who ranked “low human development” thought it was either the first or second key driver of food insecurity, malnutrition and poverty in Pakistan in the last five to seven years. Only 11 percent of respondents who ranked “gender inequality” thought it was either the first or second key driver of food insecurity, malnutrition and poverty in Pakistan in the last five to seven years.



Similarly, 11 percent of those who ranked “family structure and gender norms” felt it was the first or second most important factor to deal with in eradicating food insecurity, malnutrition and rural poverty in Pakistan.



Sixteen percent of those who ranked “unequal representation of women in decision making” thought it was the first or second politico-economic factor that may prevent adoption of the right set of measures to eradicate hunger, food insecurity and malnutrition by 2030.



1.7 Hunger, food insecurity and malnutrition are pervasive, persistent and well documented

A Strategic Review of Food Security and Nutrition in Pakistan was conducted in 2016–2017 in Pakistan by IFPRI and AKU under the direction of the Economic Affairs Division (EAD) of the GOP with guidance from the WFP. This very comprehensive analysis gives valuable information regarding the causal factors of food insecurity, malnutrition and poverty, by province. It also gives clear proposals to consider in resource allocations. A Food Security Analysis for Pakistan, also conducted in 2016–2017, under the auspices of the GOP and with guidance from FAO, WFP and UNICEF, is a survey that similarly analyses the food security situation and causal factors, using available data, providing an evidence base for food security policy development. In 2019 the UN agencies in Pakistan are collaborating with MNFSR to produce the first State of Food and Nutrition Security in Pakistan report (Pakistan SOFI).

As of early 2019, the situation was able to be summarized as follows. Regarding food security, the State of Food Security and Nutrition in the World (SOFI) by FAO and other UN agencies reports: in 2015–2017 Pakistan had a Prevalence of Undernourishment (POU) in the total population of 20.5 percent, whereas in 2014–2016 the POU was 22 percent. By comparison, ten years before, in 2004–2006, it was 23.3 percent. However, due to population growth, the overall number of undernourished people has increased to 39.5 million in 2015–2017, from 35.9 million in 2004–2006.

Regarding malnutrition, the Pakistan Demographic and Health Survey (PDHS) 2017–2018¹³ (which has slightly more up-to-date figures than SOFI) recorded that prevalence of stunting in children under five years of age in Pakistan at national level was 38 percent (declining from 45 percent in 2012–2013).

¹³ The Demographic and Health Survey is administered by the National Institute of Population Studies (NIPS).

Prevalence of wasting at national level was seven percent in 2017–2018 (declining from 11 percent in 2012–2013). There is no statistically significant difference in either stunting or wasting by gender; boys and girls were almost equally affected. Even if we look at some contributing indicators, such as those concerning maternal health or infant and young child feeding, improvements have been minimal: the SOFI figure for prevalence of anaemia in Pakistani women of reproductive age in 2017 was 52.1 percent, compared with 50.1 percent in 2012; for prevalence of exclusive breastfeeding it was still low at 37.7 percent in 2017 compared with 37.0 percent in 2012.

In Sindh, the province of particular interest for this analysis, the prevalence of stunting in 2017–2018 was higher than the national average, at 49.9 percent (declining from 56.7 percent in 2012–2013); prevalence of wasting was also higher, at 11.7 percent (declining from 13.6 percent in 2012–2013), according to the PDHS. But although child malnutrition decreased in Sindh in the five years between the PDHS surveys, the reduction was not statistically significant.

In July 2019 the results of the GOP's 2018 National Nutrition Survey (NNS), the first since 2011, were released, and contained district-level (sub-provincial) malnutrition indicators. Similarly, in 2019 the results of the Government of Sindh-UNICEF 2018 Multiple Indicator Cluster Survey (MICS), were released, updating 2014 MICS (Government of Sindh, 2014), which had been a frequently cited source of information on indicators for contributing factors to malnutrition in the province (deficiencies in infant and young child feeding practices, poor water quality and sanitation, and low maternal education are all key contributing factors). Unfortunately, according to these surveys, and as borne out by the PDHS and SOFI, there has been little improvement. Of particular note is that overweight and obesity are rising in Pakistan: NNS 2018 reports that the prevalence of overweight in children under five almost doubled in just seven years, increasing from five percent in 2011 to 9.5 percent in 2018.

In summary, population growth, climate change, weak governance of scarce resources of water and land, almost total dependence of the population on the Indus River irrigation system, lack of modernization of agriculture, widespread multidimensional poverty, poor human development and significant inequality, including by gender, are among those factors that are important for eradication of hunger, food insecurity and malnutrition in Pakistan. Furthermore, the poor nutritional status of mothers and young children in Pakistan is failing to be resolved at the rate necessary to realize SDG2 by 2030, suggesting that interventions in one or more of these factors have to be scaled up or redesigned, or that capacity is lacking to implement, monitor, fund or take through to the next stage.

2. Design and focus of the present policies and strategies for food security, nutrition and sustainable agriculture

Is the current set of policies and strategies sufficiently focused and well-designed to adequately address these immediate and underlying causes of food insecurity and malnutrition in the most impactful way both at a national scale and at the level of specific socio-economic groups, geographic areas, agro-ecological zones and/or administrative areas that are facing stubborn or more pervasive problems of food insecurity and malnutrition?

2.1 Policy level documents, legislation and guidance connected to food security, nutrition and sustainable agriculture

For overall planning for development in Pakistan, the documentation includes the Pakistan Vision 2025 (a policy statement) and the Eleventh Five Year Plan mentioned in the introduction (a planning document). These were prepared by the GOP's Planning Commission (PC) under the former PMLN government. These documents are founded on a sensible theory of change to provide economic, human and social development in the country, with the seven pillars of Vision 2025 being: I. Putting People First; II. Achieving Sustained, Indigenous and Inclusive Growth; III. Governance, Institutional Reform and Modernization of the Public Sector; IV. Energy, Water and Food Security; V. Private Sector and Entrepreneurship-led Growth; VI. Developing a Competitive Knowledge Economy through Value Addition; and VII. Modernizing Transportation Infrastructure and Greater Regional Connectivity. In fact, all seven of the pillars will be important in eradicating hunger, food insecurity and malnutrition in Pakistan. The PC is preparing a Twelfth Five-Year Plan for the period 2019–2023 under the PTI government, through a consultative process involving provinces, the private sector, the UN and others, with emphasis on social sectors, poverty alleviation, job creation and improvement of governance for ensuring transparency and overcoming corruption.

On a yearly basis, the PC publishes annual plans, the latest of which is Annual Plan 2017–2018. These plans are also prepared under the seven-pillar framework. The Annual Plan is what underlies the Public Sector Development Programme (PSDP), and at provincial level, the Annual Development Programme (ADP). PC officials interviewed suggested, however, that it is very difficult to translate these plans into reality in the present politico-economic environment (see Section 6). The budgetary allocation processes for PSDP/ADP will be considered in Section 5.

BOX 7: ADEQUACY OF CURRENT SET OF POLICIES AND PROGRAMMES

Twenty-six percent of respondents thought “yes, the current set of government-led policies and programmes is sufficiently focused and well-designed to adequately address both the immediate and underlying causes of food insecurity and malnutrition”, while 30 percent responded “no”, and 44 percent did not respond either yes or no.

Reasons for thinking “no” included statements such as, “lack of implementation”, “lack of monitoring” “shopping list of actions”, “insufficient consultation in languages other than English, and with those who are illiterate”, “lack of integration of climate change and resource management” and “focus on agriculture, rather than food security and malnutrition”.



BOX 8: RELEVANT POLICIES AND PROGRAMMES

When asked, “Which of the adopted policies are relevant to addressing FNSSA in Pakistan?” respondents agreed that all of the following were relevant nationally: the Constitution of the Islamic Republic of Pakistan, NFSP, NWP and NCCP. Some respondents ranked these.

Other policies, legislation, regulations and guidance documents that respondents suggested as being important were: the Seed (Amendment) Act 2015 and the Plant Breeders Rights Act 2016.

Respondents agreed that the following were relevant in Sindh province: SAP, Sindh Tenancy Act 1950.

When asked, “Which of the programmes and interventions currently run by Pakistani governments (national or provincial) are relevant to addressing FNSSA in Pakistan?” respondents nominated the following: Nationally: the BISP. In Sindh province: the AAP.

At federal level, food security and many issues that relate to the devolved subject of agriculture are covered in the NFSP (Government of Pakistan, 2018) adopted by Cabinet in 2018 (one of our main policies of interest). This is a comprehensive policy that utilizes the four-dimensional definition of food security promoted by FAO of availability, accessibility, utilization and stability. Its stated goals are to: 1) alleviate poverty, eradicate hunger and malnutrition; 2) promote sustainable food production systems (crop, livestock and fisheries) by achieving an annual average growth rate of four percent; and 3) make agriculture more productive, profitable, climate resilient and competitive.

The NFSP is intended to be largely implemented at provincial level, except for aspects that have remained a responsibility of the GOP in the post-devolution scenario, such international trade. It is broad-ranging in focus, but does emphasize diversification of the food supply, so that a broader range of nutritious foods become locally available at an affordable price rather than simply the staple crops of wheat and rice, whose availability has stabilized. The success of the policy largely depends on the government working well with provincial governments to implement the policy measures meaningfully. The policy development process was lengthy and consultative, with participation from all provinces and many parts of government, the UN, civil society and the private sector (although not at grassroots level), and was led by the MNFSR.

The NFSP contains an inbuilt implementation approach involving an implementation committee chaired by the MNFSR Secretary, as well as a National Food Security Council to monitor food security and nutrition issues. This document was mainly authored by the National Agriculture Research Centre (NARC) on behalf of MNFSR, and received technical input over a number of years from FAO, IFPRI and other organizations, but it was finalized under the leadership of the former Minister for NFSR, Sikander Hayat Khan Bosan in 2018.

Nutrition is addressed in the Pakistan Multi-Sectoral Nutrition Strategy 2018-2025 (PMNS), launched by the MPDR in 2018 with technical support of WFP. This is an update of the former Pakistan Integrated Nutrition Strategy (PINS) of 2011. It is designed to align with Vision 2025 and contains guidance on the role of the federal government in supporting the implementation of nutrition policies and programmes at provincial level, for example through coordination and alignment, and consistent communication and messaging.

In 2018, MPDR also issued the Pakistan Dietary Guidelines for Better Nutrition (PDGN) with technical support of FAO. This document gives guidance on achieving health and nutrition for all ages and life stages in Pakistan using locally available foods, based on current scientific knowledge, but is cognisant of traditional dietary customs (which vary by province and AEZ). It may be utilized well in planning communication and awareness campaigns and in designing activities in provincial and national development programmes.

Other relevant national policy-level documents, as mentioned in Section 1, are the NCCP, the NWP and the NCCP, as well as legislation recently enacted or in process relating to contributing factors towards FNSSA, including that concerning promotion of breastfeeding (controls on infant formula promotion), child marriage restraint and food fortification. It is understood that a draft national human rights framework is under development, covering the Right to Food and also access to land.

In the Sindh province, the SAP 2018-2030 was adopted by Cabinet in 2018 (another of our main policies of interest). It followed a participatory and evidence-based process managed as part of the World Bank's Sindh Agriculture Growth Project. However, stakeholder consultation did not appear to reach grassroots level. It is a comprehensive policy covering crops, livestock, fisheries, agroforestry and on-

farm water usage, excluding consideration of irrigation. It has four stated objectives: 1) raise the growth rate of the agriculture sector to between four to five percent; 2) reduce rural poverty to half current levels, along with malnutrition and food insecurity; 3) make efficient and sustainable use of natural resources, minimize negative environmental impacts; and 4) enhance resilience and climate change adaptability.

The success of SAP largely depends on the government restructuring its own departments to increase capacity for service delivery, enacting regulatory reforms to incentivize private sector investment and enforce environmental safeguards, and persuading farmers to make necessary changes in land and water use practices, as well as improved water resource management by government institutions. The policy contains an inbuilt implementation approach involving a Sindh Agriculture Policy Implementation Commission (SAPIC) chaired at ministerial level to oversee and monitor the policy, a Change Management Team in the government's Planning & Development Department, and Delivery Units in each line agency responsible for implementing the policy.

For land tenure governance issues in Sindh, a comprehensive strategy for implementing the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT, or tenure guidelines) is under development as part of the EU-funded Improved Land Tenancy in Sindh (ILTS) project. The tenure guidelines are an internationally agreed set of principles that countries can customize to their own context in order to bring practical improvements food security for those who utilize land, fisheries and forest assets. Pakistan agreed to the tenure guidelines through its participation in their development and adoption by the Committee on World Food Security (CFS) in 2012.

A draft land tenure governance strategy for Sindh that was completed in 2019, identified relevant existing policies legislation requiring improved implementation, and also the possible need for certain new policies, legislation and administrative practices. In all it has 22 recommendations for government. These include the Sindh Tenancy Act 1950, which the SAP also commits the government to updating. The success of the VGGT Strategy will largely depend, after its formal adoption, on political will to reform institutional arrangements for the more effective implementation of the Sindh Tenancy Act provisions, updated or not, as well as continued efforts from civil society organizations and development partners to raise awareness.

Other relevant Sindh province policy-level documents are the Poverty Reduction Strategy (PRS) adopted by Cabinet in 2018, the Sindh Water Policy under formulation, draft Sindh Climate Change Policy, and draft Sindh Drought Mitigation Policy and Implementation Plan, as well as legislation recently enacted or in process relating to contributing factors towards FNSSA, concerning promotion of breastfeeding (controls on infant formula promotion), child marriage restraint and food fortification.

2.2 Programmes relating to food security, nutrition and sustainable agriculture.

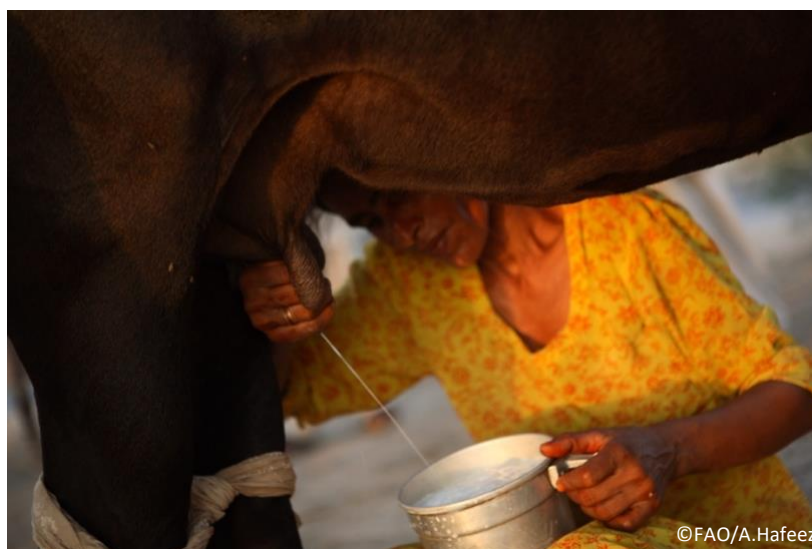
The NZHP (one of our main programmes of interest) was announced by the Prime Minister in 2012, further informed by a high level Pakistani government mission to Brazil in 2014, and gathered some momentum in 2015 and 2016 under former Minister Bosan. It now forms a commitment under the NFSP 2018. Design of this programme in a way that would work for Pakistan was attempted for over six years, with input from FAO, WFP and other technical partners, but it has not yet been launched, even on a pilot basis. The concept of this type of programme utilizes the FAO's Zero Hunger approach

of combining a school feeding programme, farmer field education and provision of agricultural inputs, and local procurement of diversified food from family farmers. Conditional social protection, communication and awareness, and nutrition-specific interventions can be added in for greater impact. The implementation challenges of this programme will be touched on again in Section 4.

In Sindh, programmes that address malnutrition have been brought together under the umbrella programme of the Accelerated Action Plan for Reduction of Stunting and Malnutrition (AAP), which began in 2016. The AAP is based on the theory of using a multi-sectoral approach to tackling poor nutrition, and includes activities under eight different sectors: Health, Education, Livestock & Fisheries, Agriculture, Social Welfare, Population and Local Government. It is a bundle of programmes that are co-implemented by government, UN and NGOs. It receives funding from diverse sources including World Bank loans, EU grants and government. For example, it includes the EU-funded Programme for Improved Nutrition in Sindh (PINS) as part of the bundle.

The AAP is a flagship endeavour by the PPP-led government and has an implementation structure, comprising a high-level position of Coordinator on Nutrition to the Chief Minister (usually held by a Secretary-level officer), an AAP Taskforce, and a Taskforce Secretariat that has been fledged from the P&D Department's nutrition section. However, the challenges of coordinating and synergizing the component programmes of the AAP, recently led to the abolition of the coordinator position and the taskforce in July 2019, with the pre-existing Nutrition Steering Committee, chaired by the Chairperson of the P&D Board, now taking over coordination of the programme. The AAP is considered to have superseded the Intersectoral Nutrition Strategy for Sindh (INSS), which covered the period 2013 to 2016. Similarly, the Taskforce Secretariat has taken over the role of the Sindh Scaling Up Nutrition (SUN) Secretariat, which was initially established in 2016; there are moves afoot to re-establish the SUN Secretariat, however.

Other relevant programmes run or planned to be run, with or without the contribution of development partners, include the national Benazir Income Support Programme (BISP), which offers unconditional social protection of limited coverage, the forthcoming NAEP from the PTI-led GOP as well as its new *Ehsaas* programme. These are all national level, and potential impact in the PPP-governed Sindh is undetermined.



2.3 Summary of policy and programme environment for FNSSA

In summary, an impressive array of relevant policies, strategies and guidelines has been finalized in the last two years, putting Pakistan in general, and Sindh in particular, in a theoretically good position with respect to attempts to implement evidence-based change in FNSSA outcomes. Action documents are in preparation in some cases, but overall there is a tendency for action plans, investment plans and monitoring frameworks to be missing from finalized policies, and regarded as a future step that is part of implementation. Guidance has been published on how to tackle malnutrition using a multisectoral approach, including through dietary changes. The cost of a nutritious diet is known, but not affordable for the poor at market prices, and insufficient incentives are available for the poor to grow their own sufficiently nutritious food. A medium-term multisectoral malnutrition alleviation programme (i.e. the AAP) is running in Sindh with the financial and technical support of development partners. Pakistan has an overall plan for economic, social and human development that if enacted would address poverty, hunger and malnutrition. A flagship social protection scheme has been established (BISP) that can be refined and broadened. Sindh has a costed poverty reduction strategy (PRS) focused on social services, and a roadmap for its implementation. The GOP has announced its *Ehsaas* poverty alleviation programme but is yet to work out the details.

Implementation probabilities will be discussed in Section 4, but at this point we can say that policies are in place both nationally and at Sindh province level to encourage agricultural growth, raise rural incomes, increase availability of diverse and quality foods at affordable prices, develop value-chains and add value. There are national policies that address issues of climate change, water resource management and allocation, and equivalent Sindh provincial policies are in preparation. Agriculture and food security policies are attempting to incorporate concepts of natural resource management, climate resilience and nutrition-sensitive agriculture at a conceptual level. Gender sensitivity is also written into these policies, but at this stage there is little evidence in the policy dialogue to indicate it will be meaningfully incorporated during implementation via practical actions and real changes. Notwithstanding the existence of the NFSP, the Vision 2025, the Five-Year Plan and the availability of the Strategic Review and the Food Security Analysis, there are existing agricultural policies and programmes that relate to the wheat, pulse, cotton, sugar and tobacco sectors that are working against FNSSA in Pakistan, but which have failed to be reformed by government for politico-economic reasons (elaborated in Section 6).

BOX 9: UNDERLYING DOMAINS FOR INVESTMENT NOT DIRECTLY RELATING TO FNSSA, AND THE ROLE OF TRADITIONS AND NORMS

In focus groups it was strongly highlighted that the three areas of water, sanitation and hygiene (WASH); schooling; and primary health care may be among the most important to invest in, for better nutrition outcomes in the long term (this refers not to isolated development projects and programmes, but rather to major investments by government or public private partnerships in universally-accessible public services).

Focus group participants also emphasized that traditional dietary customs, feeding practices, housing styles and social norms play a large role in preventing nutrition-positive behaviours being adopted, but that good methodologies were now being used for behavioural change in most social development projects. Taboos that exist around eating certain foods, as well as religious requirements, restrict the diets of some segments of the population.

The FNSSA focused policies and programmes mentioned above will be insufficient to bring noticeable change. It is outside the scope of this analysis to consider whether the other main sectors involved in tackling malnutrition (related to drivers mentioned in Section 1), for example, municipal services infrastructure, education and health, have adequate policies and investment plans to assist realization of SDG2. The consensus opinion is that major improvements to basic services are required in Pakistan to allow the malnourished population to take full advantage of a diverse and nutritious diet, if, through good economic, agriculture and food security policies, incomes were raised enough to purchase this diet, or if it were provided under a government food distribution programme, or if it were made more affordable through market reforms or subsidies.

These basic services will include the universal provision of acceptable quality drinking water; urban solid waste management; sanitation systems; safe sewage treatment and disposal; and hygienic facilities in homes for washing. Recently, the World Bank highlighted the very high *E. coli* contamination of groundwater in Sindh that is affecting nutrition intake through the vicious cycle of gastro-intestinal infections, reduced nutrient absorption, and then re-infection through contaminated water. (Mansuri, G., 2018) (Mansuri G., et al, 2018). It was further argued that the absence and/or low quality of sanitation systems (inadequate treatment of faecal waste) is the main culprit rather than simply the practice of open field defaecation, and that environmental enteropathy (permanent damage by *E. coli* infections to the nutrient absorbing function of intestines of young children) is causing lifetime malnutrition problems.

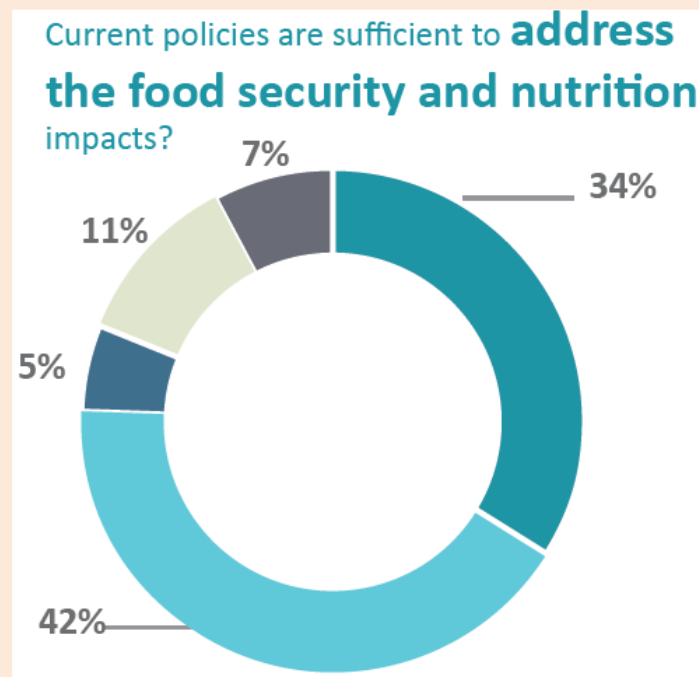
Apart from this, an upgrade of essential health services in Pakistan, including higher rate of vaccinations, access to contraception, and antenatal care, and compulsory education of an acceptable standard, along with enforcement of laws regarding child labour and child marriage, are also needed if any headway is to be made in the nutrition problem. An extension of the social protection system, using conditionality methodology, may be necessary for an initial transition period to catalyse behavioural changes required for better nutrition, particularly school retention and phasing out of child labour and child marriage. In this respect the GOP's forthcoming *Ehsaas* programme may produce results, if designed well.

3. Suitability of policies for projected changes in population, youth, climate and urbanization

Are current policies and strategies sufficiently forward looking to also address the food security and nutrition impacts of emerging problems related to, for example, migration, youth unemployment, climate change, population growth, urbanization, etc.?

BOX 10: ARE POLICIES AND STRATEGIES FORWARD LOOKING?

When asked “are the current policies and strategies sufficiently forward looking to also address the food security and nutrition impacts of emerging problems related to, for example, migration, youth unemployment, climate change, population growth, or urbanization”, 34 percent of those who responded “strongly agreed”, 42 percent “somewhat agreed”, 11 percent “disagreed”, seven percent “strongly disagreed”, five percent felt “neutral” or had “no opinion”. Overall a majority (76 percent) were comfortable that current policies are sufficiently forward looking.



Strongly agree Somewhat agree Neutral/no opinion Somewhat disagree Strongly disagree

3.1 Gains made in food security, nutrition and sustainability of food systems risk being erased by the challenges of climate change, water shortage and population growth

Climate change is expected to trigger substantial migration and resettlement requirements all over the world in the next few decades, even with a global warming that is on the low side of just two degrees Celsius, firstly through the submersion of highly-populated coastal cities because of sea level rise, and secondly through other climate-driven effects such as crop failure and then abandonment of previously economic food production zones. In countries like Pakistan, where the population is still increasing at a high rate, the challenge is magnified.

In Sindh, the implementation of specific actions for climate resilience under objective 4 of the SAP will be a very important for the government to pursue, as will further development partner designed climate-resilience projects, for example, using the Green Climate Fund financing mechanism. A new study (FAO *et al*, 2019) of agro-ecological zones conducted by FAO in 2018 has noted that even since 1980, the number of distinct AEZ in Sindh has changed from eight to ten. The tail ends of the canal water distribution system, the rainfed and desert areas, and the coastal areas, are all more at risk in terms of precarious livelihoods and already reduced suitability for agriculture and livestock production owing to lack of water.

As mentioned in Section 1, the near total dependence on the Indus River basin for food production in Pakistan and the expected reductions in water availability as climate changes mean that Pakistan faces an enormous challenge of upgrading its food production system to a climate-resilient one in a short time. Not only do the agricultural production techniques and on-farm water usage have to change, but also so does the overall water resource management policy. The province-level water policy for Sindh that is under formulation will be an important update to Sindh's Irrigation Strategy of 2016, and it needs to overcome the separation of water and agricultural policy that occurred when the SAP was formulated.

In 2018, a specific drought mitigation policy and implementation plan was commissioned by the Provincial Disaster Management Authority (PDMA) with the technical support of FAO, in order to prepare for future droughts. As of early 2019, Sindh was in the grip of another declared drought affecting eight districts: Tharparkar, Umerkot, Sanghar, Jamshoro, Badin, Thatta, Dadu and Kambar Shahdakot. A Sindh Drought Needs Assessment Report (IOM *et al*, 2019) conducted in 2018 found that the prevalence of food insecurity based on Food Insecurity Experience Scale (FIES) was high, as 71 percent of the surveyed households are either moderately or severely food insecure (with 32 percent are severely food insecure). Prevalence of food insecurity is higher among households in desert/arid areas and female-headed households compared with households in non-desert/arid areas and male-headed households. These worrying findings are consistent with the food security impact of droughts experienced in prior years in the province.

3.2 Population growth

If no further decline in fertility rate occurs, the population of Pakistan is projected to reach 344 million people by 2050, based on projections in the Eleventh Five Year Plan (Government of Pakistan, 2014). If we use the projection by the World Bank released in March 2019 based on the annual population growth rate of 2.4 percent in the latest census, the population is expected to be even higher, at 347 million by 2047. Positive economic scenarios forecast for Pakistan, in which poverty is reduced, all depend on reducing the population growth rate. But population planning in Pakistan is considered to have largely failed, in spite of numerous programmes over the years, probably for sociocultural reasons such as early marriage, preference for boys over girls due to the absence of a social protection system for the elderly, which leads to large family size, and possibly the influence of religious beliefs. Investment in more effective means of persuasion towards ensuring higher age of first time mothers, larger birth spacing, and smaller overall family size, will pay dividends in poverty reduction, food security and nutrition.

The ratio of rural to urban populations is about 65:35 in Pakistan, but in Sindh, about half the population is considered to live in urban areas. Sindh contains the country's largest city, Karachi, having a disputed population size of between 14 and 20 million. Existing policies do not seem to focus on the sustainability of the food system for urban Pakistan in the future. However, Sindh's PRS does specifically attempt to address urban poverty, which as a driver of food insecurity, will be important. Generally, it is considered that rapid or unplanned urbanization has not only put an infrastructure strain on larger cities in Sindh (especially regarding drinking water, sanitation, solid waste management and transport), but is a threat to food security, through the encroachment of prime agricultural land, the pollution of agricultural water supplies by industrial and urban effluent, and failure to develop rural urban centres. Implementation of government commitments to address infrastructure, environmental standards, and rural centre development, will all be important in the future.



3.3 Migration trends and effects

Migration of several kinds is a feature of Pakistan, including Sindh and has both positive and negative effects. Remittances from expatriate Pakistanis living overseas (and from urban areas like Karachi, along with circular migration) are still very important to rural economics in Pakistan and hence important to food security and nutrition. One reason for the fluctuating and uncertain population of Karachi is the regular movement of income earners from rural areas to Karachi for the better job prospects, and then periodically back to villages to provide income and positively impact food security. Internal migration due to conflict, and the negative impact this has on food security, is well known, particularly from parts of Pakistan that are near its borders with Afghanistan. Internal migration due to natural disasters and the negative impact on livelihoods and food security is also well known in Pakistan, particularly after the earthquake, super-floods and droughts in the last two decades. The National Disaster Management Authority (NDMA) and the PDMA in each province have worked well in recent years with the Natural Disaster Consortium (NDC – which is made up of several UN agencies and NGOs), to plan and mobilize contingency resources for expected natural disasters. Usually, response to natural disasters and managing the requirements of internally displaced people receives a high level of input from the military, and Pakistan is no exception. Internal migration due to climate change is also increasing, but does not appear to have been systematically studied.

3.4 Youth policies

Youth policy could be an overlooked area with respect to its impact on FNSSA. The Pakistan National Human Development Report 2017 (UNDP, 2017) reports that Pakistan now has the largest proportion of young people in its population it has ever had in its 70-year history. The poor nutritional status of this large proportion of the population is of significant concern, as they form the future agricultural workforce, as well as that of other sectors. But if enabling factors are addressed, then it is predicted that by 2050, Pakistan's economy will rise from twenty-fourth largest GDP (on a purchasing parity power basis) to be the sixteenth largest (PWC, 2017), overtaking countries such as Australia and Italy. Almost 4 million youth are entering the working age population *per annum*, and if current labour force participation rates remain constant, 900 000 new jobs are needed every year for the next five years. The report states that illiteracy rates among young people are not as bad as the overall Pakistan rate, at only 30 percent, although the proportion of out-of-school Pakistani children is also high, at about one quarter of all children. A Sindh Youth Policy was adopted by Cabinet in 2018, around the same time as the SAP, which if implemented, may promote more training and job creation for young people.

3.5 The future of the female labour force in agriculture

The future of the female labour force in agriculture and other spheres also requires planning. There seems to be little recognition that if and when population planning policies become effective, the upswing in female labour force participation rates in Pakistan will require marked changes in policies, facilities and gender norms. Remuneration and working conditions for female farmers in Pakistan, and especially in Sindh, are unsatisfactory (FAO, 2015), with a high reliance on informal and unpaid contributions, and are not specifically addressed in the SAP, the NFSP and other policy documents. Similarly, women's access to economically productive resources of land and water is constrained by poor governance of tenure and limited access to participatory water management arrangements. Cultural norms heavily restrict women farmers' opportunities to participate in the policy dialogue.

Yet jobs and incomes for women in agriculture play a large role in household food security and

nutrition, because of the ability to afford a calorific and nutritious diet. Recently, specific women's agricultural extension services (information and training) have started to be supplied by the government in Sindh under the agriculture component of the AAP, but mainly through mobile telephony and associated technology, not face-to-face. In focus groups it was suggested that establishment of a special women's wing in the Department of Agriculture, Supply & Prices (DA); or a special agriculture unit in the Women's Development Department (WDD), could assist in packaging a solution to these issues, and this idea could then be extended to livestock, fisheries and water management. Women-specific programmes were suggested because the public sector's capacity to undertake gender mainstreaming in its policies and programmes is extremely weak.

In summary, the required transformation to climate-resilient agriculture and smart water resource management, and the effective utilization of a younger, more literate labour force are urgently required to manage food security, nutrition and sustainable agriculture into the future in Pakistan and in Sindh in particular. The climate-related aspects of the SAP and the NFSP, and the corresponding climate, water and drought policies, require concrete implementation, as do the commitments to address the needs of women in agriculture. Related policies that will help the country cope with internal migration, urbanization, population growth and possible increases in female labour participation rates also have to be put into practice.

4. Implementation mechanisms and capacities and their reach

Are the implementation mechanisms and capacities that are in place adequate to reach specifically those people and areas most affected by food insecurity and malnutrition?

In this section we will look at the implementation mechanisms and capacities of government, especially in relation to the target policies and programmes of interest, noting that relevant information on this issue is also found in Sections 5 and 6.

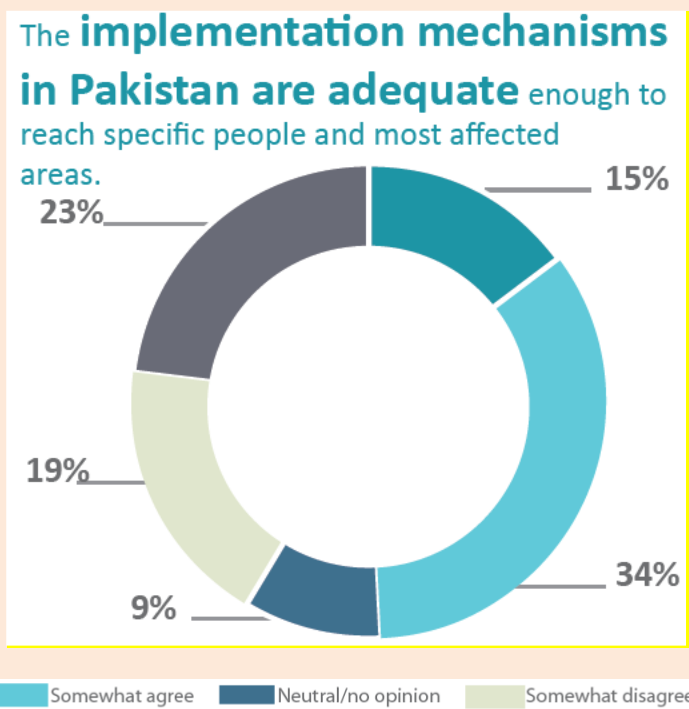
Pakistan’s government’s administrative capability has a complex history that is tied up with the, at times, strong role of the military (see Section 6) and periodically weakened legislative and judiciary arms of governance; distraction of various military conflicts; ‘capture’ by politicized civil servants; and some inefficient, anachronistic processes that have escaped reform. However, this does not apply to all services, or all agencies. Pockets of the administration at both federal and provincial level have shown capacity to introduce more effective systems, such as in procurement, staff performance management, economic analysis, and implementation of high-tech, scientific endeavours. For example, the National Database and Registration Authority (NADRA), which issues identity cards to Pakistanis, is one agency that is modernized and could be considered to be ahead of many other countries in its service delivery and systems, although possession of an identity card is by no means universal. Within Pakistan, more effective management systems and more rapid adoption of modern technology are apparent in the private sector, the military and the development sector.



BOX 11: ADEQUACY OF IMPLEMENTATION MECHANISMS AND CAPACITIES

Fifteen percent of respondents strongly agreed and 34 percent agreed with the statement, “the implementation mechanisms and capacities that are in place in Pakistan are adequate enough to reach specifically those people and those areas most affected by food insecurity and malnutrition”, while 19 percent “disagreed”, 23 percent “strongly disagreed”, and nine percent felt “neutral” or had “no opinion”. Overall slightly less than half (49 percent) were comfortable that implementation mechanisms and capacities are adequate.

In focus groups, typical comments made included “government departments operate in silos”, “no coordination”, “low understanding of nutrition among government officials”, “department officers do not have technical training for projects”, “motivation to achieve impact is missing”, and “unwillingness to endorse social change”. Opinion varied greatly depending on whether the respondents were from within government or outside government.

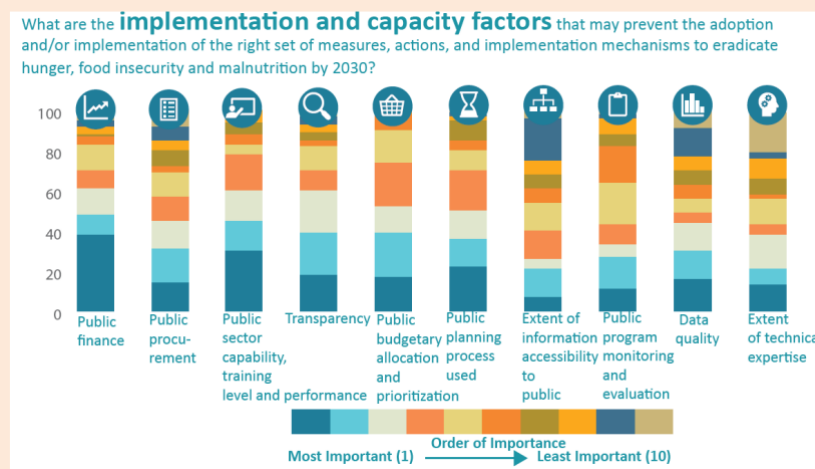


BOX 12: IMPLEMENTATION AND CAPACITY FACTORS

Forty-eight percent of those who ranked “public finance management system design” felt it was the first or second most important implementation and capacity factor that may prevent adoption of the right set of measures to eradicate hunger, food insecurity and malnutrition by 2030.

At the same time 39 percent who ranked “transparency of public funds expenditure and decision making” thought it was the first or second most important factor, and 45 percent of those who ranked “public sector capability, training and performance” thought it was the first or second most important factor. Thirty-nine percent who ranked “public budgetary allocation and prioritization process used” thought it to be either the first or second factor.

Some other factors commonly highly ranked were “public procurement”, and “public planning process”.



The delay in uptake of available technology for public administration, coupled with the entrenchment of the socioeconomic class structure in the public sector, are both reinforcing inefficiencies in service delivery in Pakistan. Very high numbers of underutilized, poorly trained support staff (office boys, cooks, drivers, delivery boys and sweepers) are employed, along with a high number of office clerks of medium education level that are required to support a paper-based administrative system. This paper-based system is only now beginning to be informally hastened by the use of smartphones and messaging apps, having skipped a stage where e-mail and electronic storage of documents could be used. It is uncommon for mid-level to senior executives of government agencies to use e-mail to any useful extent.

The problem of how to utilize the high proportion of permanent staff in Pakistani government agencies that are without any tertiary education has not yet been solved (this is at around 95 percent in attached departments, while around 83 percent in autonomous agencies (Government of Pakistan, 2014)). In-service training and skills enhancement will be very important to make the most of existing staff, while marked changes in recruitment practices, favouring skilled and technically-trained personnel (with experience in areas such as climate-resilience, geographic information systems, market reform, procurement, policy analysis and other areas), will be required in the future, along with different performance management and incentive systems. Externally-conducted public sector capability analyses and then the development of formal public sector reform strategies would be beneficial. Over time, a transition to a set-up where generic services such as coffee making, office cleaning, vehicle driving and gardening are more efficiently provided by private contractors who have bid to provide them to government departments, is recommended.

Gender imbalance is very obvious in the public sector in Pakistan. In comparison with non-government organizations and the private sector of Pakistan, there is much more obvious gender inequality in the public sector. It is rare to see a female government official in a non-professional role (close to 100 percent of support staff are male) and still quite rare in professional roles (about 95 percent of professional staff are male). In policy dialogues, females are reluctant to contribute to the discussion or tend not to be in the decision-making roles, with the exception of some women who are at very senior level, who tend to come from families traditionally in those roles (the dynastic phenomenon). Affirmative recruitment strategies in the public sector to even out the gender imbalance in decision making and other roles are recommended; as well as the establishment of special units within government agencies that could boost existing efforts on programmes that target gender inequalities in the FNSSA domain (as mentioned in Section 5).

Utilization of financial resources allocated is another problem area. Key informant interviews with federal Planning Commission and provincial Planning & Development senior officials noted that schemes and projects tend to be underspent; in other words, government departments do not have adequate systems (including recruitment, procurement, planning and monitoring) or human resource capacity in place to roll out the desired policies and programmes in a timely manner. The analysis conducted for the formulation of the SAP concluded that additional public resources were not needed for agriculture, livestock, fisheries, forestry and food (see Section 5 for details), noting that the DLF and DA spent only about 25 percent of their allocated resources in 2016–2017. What was needed was a change in the proportions of funds going to irrigation and crops in comparison with livestock and fisheries; some re-alignment of departments and their structure according to new functions envisaged under the SAP; and the passage and enforcement of regulatory changes that would incentivize the private sector to invest more in FNSSA.

Government policy is proven by its budgetary decisions and the actual programmes it funds, rather than by documents it endorses or even legislation it passes, but may neglect to enforce. One key informant interviewed mentioned that the SAP and the NFSP could only be seen at the level of policy recommendations, and although adopted by Cabinet, should not really be regarded as something the respective government would necessarily implement. Regarding the SAP, although the SAPIC was notified very shortly after the SAP was adopted by Cabinet in April 2018, it took six months for the SAPIC to hold its first meeting, on 5 November 2018. This is the only formal SAPIC meeting that has taken place in one year since the policy was adopted. Out of the actions agreed at that meeting, which included a policy launch, a communication plan, the establishment of the delivery units and an action plan, only the draft action plan was prepared, using resources supplied by FIRST. However, as part of the normal budgetary process, funding for ongoing programmes for the concerned departments, in areas they were already engaged in, is continuing. It has become clear that there is low appetite in the departments for in-built implementation approach of the SAP involving a Change Management Team that would advise the line agencies on the difficult, but necessary, changes. For the NFSP, there has not been any indication that formal preparation of an action plan is underway or that the inbuilt implementation and monitoring mechanisms (National Food Security Council, implementation committee etc.) are meeting and furthering the intent of the policy. For the NZHP, the discussions about this programme that were taking place in a joint government-UN committee, stalled in 2017 over the selection of administrative areas (districts and union councils) where the pilot programme could take place, and do not seem to have been restarted.

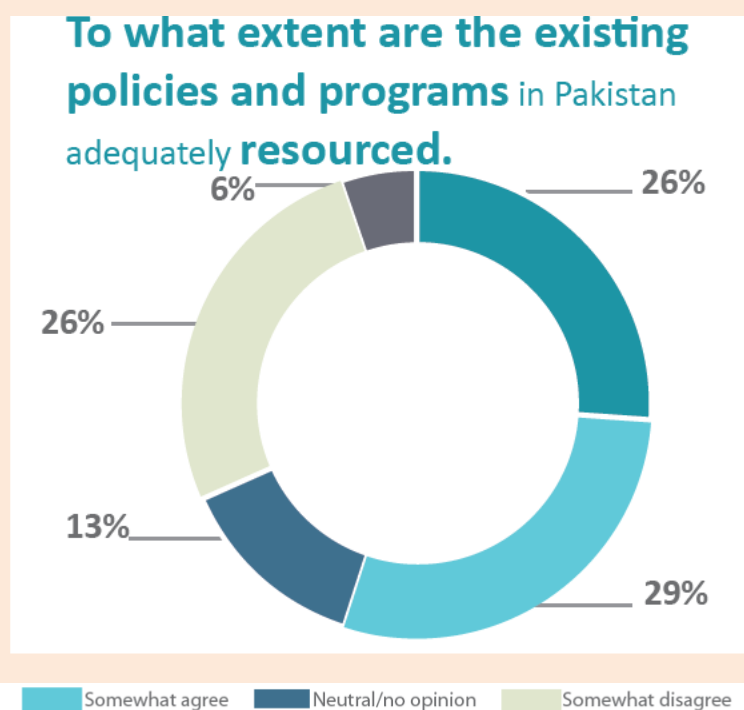
In summary, an area that may be beneficial for development partner investment is in assisting governments to undertake internal changes and capability strengthening, and in offering specific and technical assistance to enable key policies of interest to be implemented.

5. Resource allocation and monitoring

To what extent are the existing policies and strategies adequately resourced (from national resources and other sources), implemented, monitored and, in case of inadequate or incomplete implementation, what are the implications for the achievement of the intended food security and nutrition impacts?

BOX 13: ADEQUACY OF RESOURCING, IMPLEMENTATION AND MONITORING

When asked, “to what extent are the existing policies and programmes in Pakistan adequately resourced (from national resources and other sources), implemented and monitored?”, 26 percent “strongly agreed”, 29 percent “somewhat agreed”, 26 percent “disagreed”, six percent “strongly disagreed”, 13 percent felt “neutral” or had “no opinion”. We note that this question had a low response rate, of only 38 percent, suggesting many respondents were unsure or were unwilling to offer an opinion. Comments such as “inadequate monitoring”, “lack of planning”, “need for better audit system”, “transparency”, “stop corruption”, “investment is on a political basis” were recorded.



To date, it is very difficult to gauge whether Pakistan’s policies and programmes in the FNSSA sphere are failing or succeeding, as there is almost no habit of conducting independent or internal government reviews and assessments as part of the policy development cycle, with some exceptions such as the BISP. Programmes that have attracted World Bank loans, such as AAP and SAGP in Sindh, do receive a higher level of scrutiny and evaluations. Programmes receiving funding from international development partners like the EU undergo various forms of monitoring and evaluation. There is also a move by some development partners operating in Pakistan towards results-based lending or budget

support-style assistance, where funding is contingent upon government fulfilling certain criteria, but this carries the risk of failure through not properly understanding the politico-economic constraints under which the government operates.

At impact level, the failure of nutrition statistics to improve, the failure of population growth rate to be significantly curbed, and the decreasing availability of water, all speak to policy implementation failures, and there are many more examples. On the other hand, some existing policies that could be said to be working against FNSSA, have been very well-resourced over the years, including the wheat subsidy, pulse export tax, tractor programme, fertilizer subsidy, sugar price control and others. The NFSP specifically mentions the need to transition away from ineffective subsidies that no longer support the policy's mission. FAO is conducting some analysis of these issues through its technical support to the Government of Punjab. IFPRI and WFP argued in the Strategic Review that ample funds that could make a big dent in the nutrition problem could be made available by gradually phasing out the wheat subsidy. The Australian Centre of International Agricultural Research (ACIAR) has produced evidence showing the negative impact of Pakistan's pulse export tax on the domestic pulse industry (such that the country has to import pulses, with economic and nutritional consequences).

Budgets devised by governments in Pakistan and in Sindh are divided into two components, which are ongoing spending and development spending. Generally, there is reluctance to review or examine the efficacy of ongoing spending, much of which relates to salaries and benefits of permanent (regularized) government officials. Financial resources allocated to FNSSA concern a wide range of agencies and programmes, that may include not only those specifically related to food, agriculture, livestock, fisheries, forestry, land, water and climate change, but those connected with enabling factors, such as agencies focused on land registration, municipal services infrastructure, health, education and women.

Development spending is divided into PSDP at federal level and ADP at provincial level. The slow transfer of funds from federal to provincial governments in order to implement devolved functions, and consequent delays in spending allocations, is an area that regularly receives criticism by government. Programmes also end up being underspent because departments do not have the human resource capacity to implement all aspects of the programmes or cannot do so efficiently. Public criticism is often focused on perceived leakage of funds from programmes and unscrupulous awarding of contracts, including those funded by international development partners.

At this stage, there appears to be no consolidated 'nutrition' bucket in development allocations. However, based as it is on the seven pillars of Vision 2025, the Annual Plan 2017–2018 lists some highlights relating to nutrition in Chapter 21, but other important programmes are listed under population in Chapter 3, health in Chapter 5, and many other areas. A further analysis is required to calculate the planned investment in nutrition by the GOP.

Nationally, the NFSP and the NZHP have not been analysed as part of this study from a resource allocation view point. The NFSP does not have a proper action plan developed for it as yet. The NZHP pilot PC1 was costed in 2016, but these estimates are now out of date.

In Sindh, the formulation of the SAP benefited from a high-level analysis by the World Bank, of the ADP allocated and then spent on agriculture in previous years. This included ADP for the DA, the Department of Irrigation (DI), the Department of Livestock & Fisheries (DLF), the Department of Food (DF), and the Department of Forestry & Conservation (DFC). It was shown that the levels of public development expenditures by the Sindh government rose steeply following the devolution. Allocations rose from PKR75 billion in 2009–2010 to PKR200 billion in 2016–2017; utilization rates rose faster and

actual expenditures rose from PKR37.6 billion to PKR171.6 billion over the same period. The allocations to agriculture¹⁴ had generally risen in line with the higher level of overall provincial expenditures. In comparison, allocations to irrigation, much of which were for canal lining, increased sharply as a proportion of expenditure reaching 20 percent in the budget for 2017–2018.

TABLE 2. HISTORICAL ADP FOR SINDH DEPARTMENTS OF AGRICULTURE, LIVESTOCK & FISHERIES, FOOD, FORESTRY & CONSERVATION, AND IRRIGATION

Year	Total ADP (PKR billion)	ADP Allocation (PKR billion)		ADP Allocation (percent of total)	
		Agriculture*	Irrigation	Agriculture*	Irrigation
2012–13	161	11.6	8.6	7.2	5.3
2013–14	165	10.8	16.4	6.5	9.9
2014–15	143	10.6	12.9	7.4	9.0
2015–16	142	11.9	27.2	8.3	14.9
2016–17	200	14.9	21.2	7.1	10.6
2017–18	244	15.3	48.9	6.2	20.0

Within agriculture, the bulk of allocations was for the DA (which covers crops): PKR 12.5 billion in 2017–2018, as opposed to PKR 2 billion for DLF. This review of overall levels of public expenditures on agriculture suggested two major weaknesses. Firstly, actual expenditures are generally well below allocations. For example, the DA and DLF were together allocated almost PKR13 billion in 2016–2017, but actual expenditures were only PKR4 billion (less than 25 percent). In part this is due to slow and late release of funds and partly due to financial, procurement and expenditure issues within the departments. Secondly, much of the annual allocations, as well as actual spending, is allocated to ongoing projects, which have already been approved, which leaves little space for changing priorities or taking on new programmes and projects. Other issues with public spending were the large recurrent, salary-related expenses, particularly in extension but also in research (these mostly relate to non-technically qualified, support staff); a very high priority to the Sindh government’s tractor programme (almost one-third of total public sector expenditures for agriculture, livestock and fisheries were for provision of tractors); and the high proportion of livestock expenditure on veterinary and animal health aspects that were mainly curative, as opposed to preventive aspects.

The development of the SAP Action Planning document also involved further analysis of the historical ADP for individual parts of the DA, DLF and DFC, this time by FIRST. This was done to examine areas of policy intent that will require new allocations, if any, and whether the existing funding distribution would support implementation of the proposed policy priorities, and was a first step in analysing the overall capacity of the departments to deliver. A summary of this information is in Tables 3, 4 and 5, but it does not include analysis of underspending.

Table 3 shows that the Agriculture Research wing in DA in the last five years from 2014–2015 through to 2018–2019 was allocated a total of 26 schemes with a value of PKR1.679 billion. The more overweight Agriculture Extension wing was allocated a total of 44 schemes totalling PKR13.914 billion (it needs to be clarified if this includes funds also made available under the AAP for the Agriculture for

¹⁴ Including agriculture, livestock, fisheries, food, forestry and wildlife – irrigation figures are shown separately for the purpose of comparison.

Nutrition programme). This is an area of the department that has to make significant changes under the SAP, to respond to consultation feedback about its lack of effectiveness towards poor, women, landless and small farmers. The Bureau of Supply & Prices received only PKR214 million and the Seed Corporation PKR180 million. But these two areas of the department are likely to take on a larger role if the SAP measures are fully implemented, especially those relating to agricultural market functioning, access to credit, storage and post-harvest losses, crop insurance, seed quality and availability, crop demand and supply forecasting. The Agriculture Engineering and Water Management (including soils) wing, which covers the expensive tractor programme mentioned earlier, was allocated PKR32.964 billion in the last five years, for 62 schemes.

TABLE 3: GOSINDH DEPARTMENT OF AGRICULTURE, SUPPLY & PRICES: ALLOCATIONS AND SCHEMES IN THE PREVIOUS FIVE YEARS

Wing or unit	Financial Year	2014–15	2015–16	2016–17	2017–18	2018–19	5 years total	Average per year
Agriculture Research	Total schemes	5	4	4	5	8	26	5
	Total value PKR million	257	345	266	353	476	1,697	339
Agriculture Extension	Total schemes	8	6	7	12	11	44	9
	Total value PKR million	3 437	1974	2 629	2 830	3 043	13 914	2 783
Bureau of Supply & Prices	Total Schemes	1	1	1	1	0	4	1
	Total Values PKR million	50	80	79	05	0	214	43
Sindh Seed Corporation	Total schemes	0	0	0	1	1	2	1
	Total value PKR million	0	0	0	45	135	180	90
Agriculture Mechanisation	Total schemes	5	7	5	5	10	32	6
	Total value PKR million	2 333	2 700	3 545	3 978	2 577	15 133	3 027
Agriculture Water Management	Total schemes	3	2	4	6	15	30	
	Total value PKR million	1 145	4 181	4 490	5 323	4 708	19 847	3 969

As agroforestry will also be included under the SAP, the DFC's allocations were also considered, as shown in Table 4. These were for a total of 78 schemes, or PKR4.260 billion.

TABLE 4: GOSINDH DEPARTMENT OF FORESTRY & CONSERVATION: ALLOCATIONS AND SCHEMES IN THE PREVIOUS FIVE YEARS.

	Financial Year	2014/15	2015/16	2016/17	2017/18	2018/19	5 years total	Average/year
Forests and Wildlife	Total schemes	23	15	14	16	10	78	16
	Total value PKR million	966	900	804	840	750	4 260	852

Table 5: GoSindh Department of Livestock & Fisheries: allocations and schemes in the previous five years, shows that the Livestock part of DLF was allocated PKR7.244 billion over the five years 2014–2015 to 2018–2019, covering 143 animal husbandry schemes, whereas the fisheries part of DLF was allocated PKR2.933 billion, covering 49 schemes. In the SAP consultation process, it was highlighted that the growing contribution of livestock and fisheries to provincial GDP was out of proportion to the low allocation to DLF, totalling PKR10.177 billion in these five years, compared with the more influential DA. The contribution of animal-sourced products to the diet is also expected to become more important as incomes improve and poverty decreases, leading to improved nutrition. Livestock ownership in and of itself is considered to represent a major lever out of poverty in the Sindh context.

TABLE 5: GOSINDH DEPARTMENT OF LIVESTOCK & FISHERIES: ALLOCATIONS AND SCHEMES IN THE PREVIOUS FIVE YEARS

Wing or unit	Financial Year	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019	5 years total	Average per year
Animal Husbandry	Total schemes	19	20	29	41	34	143	29
	Total value PKR million	1 695	997	1 240	1 257	2 055	7 244	1 449
Fisheries	Total schemes	7	8	11	13	10	49	10
	Total value PKR million	522	533	687	597	595	2,933	587
	Overall total schemes	25	28	40	54	44	192	38
	Overall total value PKR million	2 217	1 530	1 927	1 854	2 650	10 178	2 036

The SAP Action Planning process also included requests to department officials to provide approximate costings for necessary actions under the policy. A list of clear actions was developed, but meaningful responses on their cost were only able to be obtained from some areas of some departments. Key informants interviewed advised that investment planning is generally seen to be part of a further step in implementation that comes after the Action Plan, and is subject to the overall budget process of the provincial government, the uncertain receipt of funds from the federal government, and the duty of Delivery Units in line agencies to prepare PC1 documents with detailed programme expense calculations. Further, given a large part of the rationale for the SAP is that agency structure and staffing need to be reassessed so that resources are saved from redundant activities and redirected to new and necessary areas, it may be premature to guess at required investments.

Resource allocation has not been analysed as part of this report for other relevant policies and programmes mentioned and their lead departments, at this stage. Information can be obtained about the AAP, the PRS and other programmes, particularly from the technical assistance component of the EU-funded SUCCESS and PINS programmes.

In summary, analysis of resource allocation to the SAP, and under its action plan, has only been achievable through the use of external consultants hired under development projects. It is not evident that marginalized groups with poor nutrition outcomes such as women livestock owners, small fisherfolk, the urban poor, the landless *hari* or the small farmer will be reached or prioritized in the budgetary process for this policy. However, these groups may be more likely reached through the PRS and the AAP provincially, or the BISP and the *Ehsaas* programme nationally. For allocations through the SAP that would benefit these groups, the government could consider firstly a more representative membership of the SAPIC (see Section 4) and secondly how to formalize the opportunities for civil society and the development partners to provide input to the political leadership. Another possible line of enquiry is how the Rural Growth Centre concept in the PRS could be somehow utilized to achieve some of the objectives of the SAP that may positively impact these groups.



6. Main political economy factors having an impact on hunger, food security and malnutrition

What are the political economy factors that may prevent the adoption and/or implementation of the right set of measures, actions, and implementation mechanisms to eradicate hunger, food insecurity and malnutrition by 2030?

Political economy factors have an important role in the adoption and implementation of FNSSA policies and programmes in Pakistan. In this section we are highlighting a few aspects of the political economy that are relevant, but a much deeper analysis is available in various publications and Section 4 also contains relevant information about public sector operations.

The overall setting has been described as the ‘politics of patronage’, and it is evident that the ties of kinship and associated loyalty and obligations (for example from *haris* towards land owners) play a large role in securing the continued power of two main political family dynasties, (Husain, I. 2018) and the leverage of four main elite groups. These groups, according to the World Bank’s *Pakistan@100: Shaping the Future* report, are civil servants (i.e., government officials), landowners, industrialists and the military. The report says that “elite capture in Pakistan has affected policymaking, as in certain circumstances political leaders lack incentives to formulate policies in response to citizens’ demands, or to work towards effective policy implementation”.

In a vicious cycle, the widespread illiteracy among the population and the lack of representation of women and minorities in the four elite groups means that policies that will address food insecurity, malnutrition, poverty and human development overall, have a hard time being championed except by civil society organisations and international development partners. The current Prime Minister of Pakistan and the Chief Minister of Sindh may appear to be exceptions, but implementation of their policy objectives has to compete against the power of the four elite groups and their deep resistance to changing the socio-economic class structure.

A number of political economy factors were highlighted in Section 1 in the boxes about the questionnaire results. Some highlights of the questionnaire results are brought together in Box 14.

Senior government officials are considered to represent one of the four elite groups in Pakistan. The political economy considerations of this have been largely covered in Section 3.4. Here, some other factors of interest are briefly discussed.

Socio-cultural norms are an important consideration in Pakistan in the implementation of the required measures and actions for realizing SDG2. Compared with many other countries in the Asia-Pacific region, Pakistan has a relatively traditional mindset in most segments of society (but not all), about gender roles and the importance of the family (see also Sections 1.6 and 3.5).

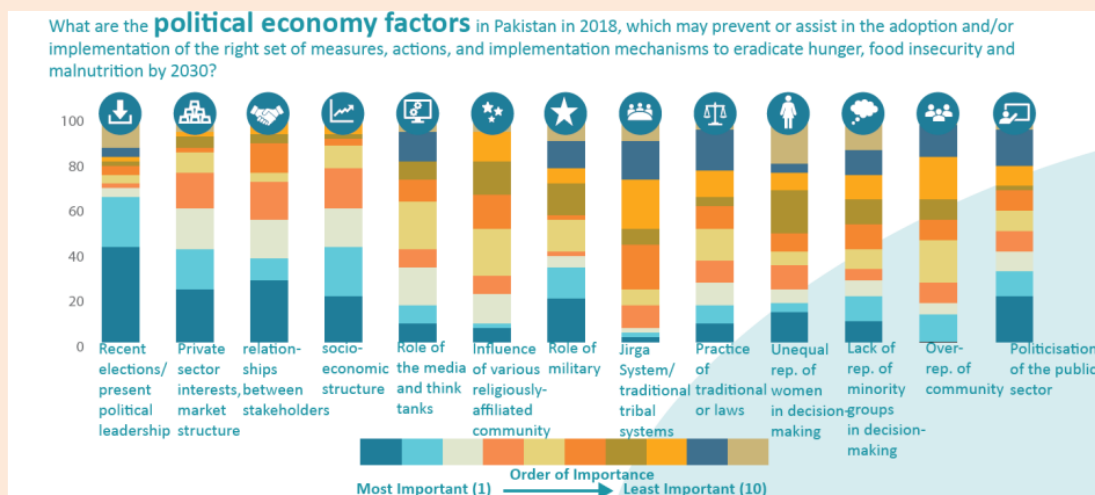
BOX 14: TYPES OF POLITICAL ECONOMY FACTORS HAVING A BEARING ON FNSSA MEASURES

Sixty percent of those who ranked “recent elections, and present leadership at federal/provincial level” thought it was the first or second politico-economic factor that may prevent adoption of the right set of measures to eradicate hunger, food insecurity and malnutrition by 2030. About 20 percent of those who ranked “politicization of the public sector” thought it was the first or second factor.

Thirty-four percent of those who ranked “complexity of relationships between stakeholders (for example, between landowners/government administrative officials/law enforcement agencies)” thought this was the first or second most important politico-economic factor, while 40 percent thought this to be the case for “private sector interests, market structure, and industry/land ownership realities”.

Forty percent of those who ranked “the present socio-economic class structure” thought it was the first or second politico-economic factor, but only 16 percent who ranked “unequal representation of women in decision making” thought it was the first or second politico-economic factor.

Twenty-six percent who ranked “role of the military” thought it was the first or second factor, but only 15 percent who ranked “media and political think tanks” thought this to be the case, and seven percent who ranked “influence of religiously affiliated groups”.



Experience of the development sector has shown that it is essential to respect the culture in trying to bring positive changes in the FNSSA situation, and to adapt interventions and development projects to suit the target beneficiaries. Governments are aware of this to some extent. The norms vary from province to province and among different ethno-language groups. Overall stand-out aspects of sociocultural norms in Pakistan that must be considered in implementing policies and programmes include quite tightly defined gender roles in society and family; hierarchies based on age, social class, gender and/or religion practised; and frequent segregation of genders and social classes in social, policy dialogue and teaching settings. Classism is highly apparent in societal attitudes in Pakistan, although this may be changing among the youth population.

Due to the dichotomous education system in which English-medium, private institutions operate in parallel with the Urdu/local language-medium, government institutions, graduates of each system

have different opportunities in the labour force, which can have a large impact on their future incomes, food security and nutritional status. This is one of the reasons why investment in universal, standardized education as per the constitutional right of Pakistani children, would be one of the key areas to unblock progress towards SDG2. This education should be delivered in mother tongues but with ample opportunity to acquire English and Urdu (that is, the tri-language model of education).

It is apparent that, in the interplay of the various political blocs, party alliances and coalitions, the role of the military in political events in Pakistan can influence the passage of legislation relating to FNSSA and other subject areas, and related decisions by government leaders. This is because the military still has tremendous influence in Pakistan (and is considered one of the four elite groups). During the present period of democratic rule, the military has filled capacity gaps in domestic law enforcement, for example to restore law and order relating to gangs and crime rings in Karachi, to break up longstanding protests against the government, to conduct counterinsurgency operations within Pakistan's borders.

Complex relationships between land owners and government officials, and law enforcement agencies have been mentioned earlier in this report in Section 1.4. They can skew decision-making at district level, in some provinces. This has slowed implementation some of the necessary reforms to land tenure governance and water resource governance that are needed for good FNSSA outcomes. It is a major reason behind land tenure governance being an unresolved structural issue that is highly sensitive and requires careful, incremental policy work, given that historical attempts at land reforms have been unsuccessful. Being one of the four elite groups, landowners have influence over the passage of legislation and its implementation that is contrary to their interests.

The media is very robust in Pakistan, with private media vigorously reporting on topical issues, the activities of the government, and its personalities. State media is government-controlled and delivers government-sanctioned messages, i.e., it is not independent or separate. The advertising sector is also strong and reveals much about the everyday concerns of consumers, including in relation to nutrition, housing, food safety, water quality, transport and other matters. Social media is playing a growing role in awareness raising and spread of political ideas, both helpful and unhelpful, as elsewhere in the world.

Religion has been central to the political discourse in Pakistan, featuring in discussions on an array of topics including FNSSA. Policies, programmes and reforms often need to get the buy-in of religion-based political parties, both to gain acceptance with the general public and to be successfully legislated, even though these parties are not ruling the government. Constitutional rights of religious minorities have a hard time being upheld; present legislation compounds this social phenomenon. In focus groups, it was mentioned that religiously-affiliated charity organizations often fill a gap left by the government in providing social services and food security, and then gain more influence over vulnerable groups of people.

7. Overall credibility of current set of policies and strategies

Considering the above analysis what is the realism/credibility of the current set of policies and strategies?

The analysis in Sections 1 to 6 indicates that the policies, legislation and guidance documents formulated and adopted in the sphere of FNSSA are based on sound evidence and theories of change. Their formulation benefited from technical information from FAO and other UN agencies working in Pakistan, and from consultation with international development partners, the literate component of Pakistani society, influential landowners and agribusiness owners, and senior government officials, in keeping with the political economy of the food, agriculture, livestock, fisheries and forestry sectors.

There is less evidence of broad consultation at grassroots level, in languages other than English and Urdu, with those who are illiterate, and with women, the poor, the landless and smallholders. There is much reliance on civil society organizations to speak for these groups, after conducting their own consultations, the effectiveness of which can depend on the technical understanding of what will drive agricultural growth and what is needed for climate-resilience and sustainable land and water management. We note that consultation for the present report took a similar track.

In developing action plans and proposals for specific projects and changes under the NFSP and the SAP, and in piloting the NZHP, governments in Pakistan and in Sindh need to conduct far more consultation with the beneficiaries of their services to the public, to determine how proposals will impact particular groups, and how the government can be more effective in achieving the objectives of its interventions.



Ongoing communication and explanation of the purpose and benefits of the policies also needs to be undertaken, to all sections of society, including to those without access to social media, utilizing the full range of traditional communication media such as posters, radio, TV, newspapers, village meetings and the like. Communication plans and strategies for each of the target policies and programmes need to be developed.

Governments need to proactively guide and train their own officials, especially those recruited in the 1970s and 1980s, on the seriousness and gravity of population growth, climate change, gender inequality, land and water governance, and malnutrition consequences, to ensure these issues are all fully understood. Because in spite of these issues being addressed in policies, the current cohort of government officials lacks practical experience in areas other than traditional programmes directed at staple food supply and agricultural productivity. This guidance should also be extended to parliamentarians, landowners and agribusiness owners. The recruitment of officials with comprehension of these issues, from the youth of Pakistan, will greatly assist the performance of the government.

Implementation of the NFSP, NZHP and SAP will require significant strengthening of public sector capacity and operation. Without this, it is not likely that these policies and their programmes will be implemented in accordance with their stated missions. There is broad consensus that all areas of implementation, including planning, costing, monitoring, evaluation, recruitment, training, auditing, reviewing, and exiting, need strengthening. The control and transparency of fund utilisation represents a key area that is well known to be a problem, and public finance management system strengthening will be fundamental, in order to gain public confidence.

8. The policy and implementation areas recommended for prioritization in resource allocation

Considering the above analysis and given a scenario of continued resource and capacity constraints, what areas of the policy framework and what implementation capacity gaps should be prioritized for resource allocation?

In this part of the report we provide recommendations about areas for increased investment, or for redirection or concentration of funding. It was emphasized at the consultation/validation workshops that maintenance of existing funding in key areas was important, subject to monitoring, evaluation and analysis of the efficacy of this funding. The importance of short-term nutrition-specific development projects was emphasized, while acknowledging that these are costly and do not provide a long-term solution to malnutrition.

8.1 Long Term Options

As a consensus-based report, this Policy Effectiveness Analysis is suggesting that governments would be well placed to achieve FNSSA objectives in the long term (but perhaps not by SDG deadline of 2030) by channelling development investments and international financing to the following areas of risk for Pakistan and Sindh in the future:

1. Population control, integrated with nutrition-responsive maternal/infant health care.
2. Climate-resilient agriculture and climate-smart water management, cognisant of AEZ.
3. Secure access and governance of good arable land, and quality, reliable water.
4. Gender equality in education, training, job creation and leadership roles.
5. Environmental hygiene infrastructure planning and implementation (modernized sewerage, drinking water supply and solid waste management).

8.2 Medium Term Options

Development partners can assist the government in the medium term by increasing funding for these areas:

1. Public sector organizational structure, cost and capability analyses, and change plans.
2. Public finance management system strengthening.
3. Training of public sector officials in policy development, programme design, monitoring, evaluation and public communication, and recruitment from the youth and female workforce.
4. Public consultation on policies and programmes in local languages, at grassroots level.
5. Supporting the creation of delivery units, implementation monitoring structures and independent review mechanisms, as well as cross-agency work and overall coordination between government departments.

8.3 Short Term Options (relating to target policies and programmes only)

There are many areas where short-term development assistance could help, including for the drought emergency and the ongoing nutrition emergency. But for the specifics of the NZHP, NFSP and SAP, development partners can assist the government in the short term by designing and funding projects to achieve:

1. Technical support and advocacy for monitoring committees (like SAPIC and national Food Security Council) to have a broad membership, regular meetings, opportunity for good contributions to the policy dialogue from all sections of society, including women, and to review implementation.
2. Technical support for preparation of an Action Plan for the NFSP.
3. Creation of Change Management Unit for the SAP in the Government of Sindh, staffed with competitively recruited, skilled experts in systems change.
4. Support for set up Delivery Units in DA and DLF for the SAP that can effectively prepare costed proposals for implementation of SAP measures.
5. Support for set up of Zero Hunger Cell in the Prime Minister's office to ensure the NZHP is rolled out on a pilot basis, and then after review, at a fuller scale.

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