

# Estimating Social Exclusion in Rural Pakistan: A Contribution to Social Development Policies

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## Abstract

There are various aspects of social exclusion. Social exclusion refers to individuals or groups being deprived of participation in social development processes such as health, education, living standard, social and political activities, etc. There is a vast body of international literature that defines these processes, but very little detailed empirical analysis available on rural Pakistan. This paper presents a situational analysis of social exclusion in rural Pakistan, using the Pakistan Rural Household Panel Survey (Round 2) data set to compute the flexible multidimensional social exclusion index. A simple 'sum-score' technique is used to estimate the depth of social exclusion at the household level. These social exclusion indicators are then aggregated to measure exclusion at the ethnic, regional and provincial levels. The results show that 52% households in rural Pakistan are deprived in wealth, income, agriculture resources, health, education, social and political participation and financial hardship. Households in rural Sindh are more deprived than households in rural Punjab and Khyber Pakhtunkhwa. The ethnic groups, Punjabis, Sindhis, Saraikis, Balochis and Pakhtuns are all deprived at certain levels in their respective provinces. However, Saraiki households are more deprived than Punjabi households in rural Punjab and Sindhi households in rural Sindh. These decentralized results can be used to formulate policies to help marginalized societies/ communities at the local and regional levels.

**Keywords:** Social Development, Social Exclusion, Ethnic levels, Rural Pakistan

**JEL Classification:** I0, I30, Q01, R20, Z1

## 1. Background

The concept of social and human development was presented over 40 years back in 1972 at a United Nations (UN) conference. Social development was defined as the improvement of human wellbeing in economic and social inclusion. The social development idea was retreated in 1980s and incorporated into broader economic and social dimensions like disadvantage, poverty and deprivation (Dempsey, Bramley,

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Power, & Brown, 2011) .

With the progression of social development principles, the social, political and economic advancement aspects evolved into the sustainable development goals (SDGs). The main objectives of sustainable development can be attained through the integration and coordination of social, political, economic and ecological apprehensions throughout the decision making process (Emas, 2015); (Holden, Linnerud, & Banister, 2016).

The SDGs comprehensively cover environmental and socioeconomic aspects, for example, poverty, inequalities in human wellbeing and concerns about education, health and social equity (Hopwood, Mellor, & O'Brien, 2005). The deprivation of these social and economic resources that make individuals unable to participate in essential economic and social activities is called social exclusion (Chakravarty & D'Ambrosio, 2006); (Hopwood et al., 2005).

As Atkinson (1998) noted, social exclusion is not only concerned with unemployment. It is the reality of life that an unemployed individual cannot keep up an adequate standard of living and turns out to be socially excluded. Employment simply increases the difference in income between low and high paid workers and does not necessarily end social exclusion. Social exclusion exists because of market failure, where individuals cannot completely participate in market activities like consumption, because of profit maximization policies like increases in prices that may exclude individuals from the market.

Social exclusion is not a unidirectional idea. It is a multidimensional phenomenon which incorporates the economic, social and political aspects of individuals (Sen, 1976); (Levitas et al., 2007). It is similar to a poverty assessment and a relative idea that can be judged through the standard of living that exists in a particular place at a particular time, but poverty and social exclusion should not be paralleled (Atkinson, 1998).

Social exclusion in developing countries like Pakistan is a major barrier in achieving the SDGs. Pakistan is a multilingual and multicultural country. Punjabis, Sindhis, Balochis, Pakhtuns, Saraikis, Pothoharis and Hindkos are the major ethnic groups and these groups face multidimensional social exclusion in health, education, living standards, poverty, unemployment and social equity (Carraro & C, 2005); (Kabeer, 2006) .

Education and health are the current major issues in Pakistan. One third of the out-of-school children in South Asia belong to Pakistan, indicating the pitiable situation of access to education in the country. Only 20% of the girls in rural households

attend school (UNICEF, 2015). Punjab is a better-positioned province of Pakistan with respect to its social, political and economic situation. However, the education sector in Punjab still suffers from several challenges; 45 % of all schools are deficient in facilities and teachers, and more than 50% of the children are enrolled in these deficient schools (Hameed, Padda, & Dahar, 2017).

The health conditions in Pakistan are also pitiful. One in ten children dies before the age of 5 years and over half of the children die in their first month of life (UNICEF, 2015). In Pakistan, 110 children die every day due to water and sanitation related diseases, 36 % of the population lives without access to sanitation and 40% households in rural Pakistan do not have toilet facilities (UNICEF, 2015); (Hameed & Padda, 2018). The perceptions of welfare at the household level also show no improvement. A significant percentage of Pakistanis feel that they are worse off in terms of their household economic situations except province KP (GoP, 2016). Pakistan also faces political and social community level participation challenges. More than 50% Pakistanis vote for candidates on the basis of the biradri or caste system (Shawar & Asim, 2012). Political and social participation at the household and community levels in Pakistan are bound by the landlord, industrialist and wadera culture (Mahmood, Sohail, Mushtaq, & Rizvi, 2014).

There is a variety of literature available on social exclusion estimation through social development indicators such as lack of participation in social institutions (Duffy, 1995; Silver, 2015); social exclusion and deprivation by Sen (1976) and the Melbourne Institute approach by Scutella, Wilkins and Horn, (2009) and Scutella, Wilkins and Kostenko, (2009).

This paper uses the Melbourne Institute procedure to measure social exclusion through multidimensional accessible indicators using the Pakistan Rural Household Survey (Round 2) data set. This paper presents a situational analysis of social exclusion in rural Pakistan. The social exclusion index is based on material aspects such as financial hardships, living standard, employment, social and political aspects such as education, skills, health and disabilities, community/political level participation, and personal safety domains. Each domain is defined by several indicators. A simple 'sum-score' technique has been used to estimate the depth of exclusion at the household level. The social exclusion indicators are then aggregated to measure exclusion at the ethnic and provincial levels. These decentralized results can be used to formulate policies to help marginalized societies/communities at the local and regional levels. Section 2 of this study depicts the materials and methodology employed, section 3 presents the results at the ethnic and provincial levels and the last section of the study describes the conclusions and the way forward.

## 2. Materials and Methodology

### 2.1. Data sources

To assess social exclusion in rural Pakistan, this study uses the Pakistan Rural Household Survey (2013) conducted by Innovative Development Strategies (Pvt.) Ltd. (IDS) under the Pakistan Strategy Support Program (PSSP), funded by the United States Agency for International Development (USAID). It is a unique survey that captured household ethnicity classifications in Pakistan. Conversely, the Household Integrated Economic Survey (HIES) is one of the largest surveys in Pakistan, which is conducted almost every year but does not capture household ethnicity classifications. Thus, this study uses the Pakistan Rural Household Panel Survey (2013). This survey consisted of 76 blocks as Primary Sampling Units (PSUs) and 2090 households as Secondary Sampling Units (SSUs) in rural areas of three provinces (Punjab, Sindh and KP) of Pakistan. The fourth province, Balochistan, was not included due to unavailability of data. The survey was conducted in 19 districts, which included 12 districts of Punjab, 5 districts of Sindh and 2 districts of KP. The collective data are representative of the rural areas of the provinces. This study uses information from 1936 out of 2090 households. The 154 households were dropped due to the lack of complete information.

### 2.2. Indicators

This paper uses eight life domains and thirty two indicators, which include material resources, education, health, living standard, financial hardship and food security, economic shocks, personal safety, and social and political participation. Each life domain is further defined by several indicators (Scutella et al., 2009); (Scutella et al., 2009); (Atkinson, 1998); (Alkire & Seth, 2009) and (Naveed & Islam, 2012) (See Table 1).

- a. The domain material resources is defined by four indicators including household wealth, households having less than two acres of agricultural land or no commercial plots, households without 1 or more buffalo/camel, 2 or more cattle, 5 or more sheep/goats or 20 or more poultry birds or fish farm and households whose members are jobless. All these indicators present the economic situation of a household and explicitly affect poverty and social exclusion. The household wealth deprivation level is less than 60% of the median household wealth that is obtained by dividing the total household wealth (current value of total agricultural and non-agriculture assets) by the square root of the household size, which is the standardized procedure of the OECD equivalent scale (OECD, 2011). With the help of equivalence scales each household type in the population is assigned a value

in proportion to its needs. The factors commonly taken into account to assign these values are the size of the household and the age of its members (whether they are adults or children for per adult equivalent household expenditure/wealth). The second and the third indicator in the material resources domain are related to agricultural land and livestock activities. Agricultural land and livestock activities are very important for the rural economy of the household. Generally, households in rural Pakistan are dependent on agricultural and livestock income. However, a certain level of agricultural land and livestock animals are beneficial due to economies of scale; small economies of scale means high cost, low income and low social and economic well-being. There is no hard and fast rule for deprivation of agricultural land and livestock in rural Pakistan. Therefore, this study considers deprivation status as a rationale and is based on extensive literature review. The fourth indicator is the number of households where no member of the household is employed in a private or government entity.

- b. The domain education presents the basic level of skills (literacy and numeracy) of the household head (male/female) and the formal education status of the household. Education is a major component of human capital and helps an individual in decision making and management. In Pakistan, most rural households face daily challenges in household budgeting, livestock and agriculture input/output record keeping and reading of medicine dosages and health instructions. A household is considered deprived in education domain if the household head faces low literacy and numeracy, no member of the household has five years of schooling and at least one child of school going-age (5 to 18 years) does not go to school.
- c. Health is the second major component of human capital. There is a famous saying “health is wealth” and “a sound mind is a sound body”. Health is a basic need of human beings as is education. A household is considered deprived in health domain if one or more children under the age of five years have died, if any member of the household other than the breadwinner has an illness or a disability or has suffered from an accident and at least one household member has a chronic disease (diabetes, heart disease, asthma, cancer, etc.).
- d. The domain living standard includes basic facilities of human beings like electricity, clean drinking water, sanitation, cooking fuel and type of dwelling. A household is considered deprived in the living standard domain if it does not have access to electricity, clean drinking water, sanitation, quality air, cooking fuel and a pacca dwelling.
- e. The domain financial hardship includes household savings and the household’s loan/credit status. A household is deprived if the household does not have any

savings or if the household has taken or has tried to take a loan in the last 12 months.

- f. Economic shocks are a significant domain that put the household into long run poverty and social exclusion. These shocks include the death of the breadwinner of the household, livestock epidemics/stolen livestock, the breadwinner suffering from an illness/accident/disability and loss of harvest due to reasons other than any natural calamity in the rural area.
- g. Personal safety is an imperative factor of self-confidence and the empowerment of social, political and economic participation in rural, urban and slum areas of developing and developed countries where people cannot participate in social, political and economic events frequently due to personal safety concerns. The personal safety domain includes safety while visiting the neighbors' house, a neighboring village, the neighborhood market, the main city in the district and participating in religious events/processions. A household is considered deprived in the personal safety domain if a household faces security concerns in the village, market, city and/or while participating in religious events/processions.
- h. Social and political participation does not just mean participating in electoral processes, freedom of speech and civilization of societies. A household is deprived in the social and political participation domain if the household members or individuals do not participate in or have a lack of interest in political and social events like general elections, village and community level meetings, farmer groups, cooperatives, local Panchayat/Jirga, political groups, etc.

### 2.3. Sum-score approach

This paper follows the sum-score approach to construct the social exclusion index for rural Pakistan. The sum-score approach is a method to count individual/aggregate deprivations in life domains, which a household/individual is experiencing at a point in time. This is a simple summation technique that allots general equal weights to each of the eight domains as per the implicit assumption that each domain is equally significant for overall social exclusion (Scutella et al., 2009); (Alkire & Seth, 2009); (Atkinson, 1998). Overall social exclusion is calculated as follows:

$$X_i^s = \sum_{d=1}^8 x_{id}C$$

Where  $x_{id} = \frac{\sum_{k=1}^{K_d} x_{id}^k}{K_d}$ ,  $x_{id}^k$  is a binary status indicator, which means that indicator  $k$  is deprived in life domain  $d$  for household  $i$  and  $K_d$  is the total number of deprivations in life domain  $d$ . For example, the material resources domain consists of 4 indicators ( $K_{\text{materialresource}} = 4$ ) and household A is deprived in all 4 indicators so  $x_{\text{materialresource}} = \frac{1+1+1+1}{4} = 1$ . If

**Table 1:** Domains of Sustainable Development and Social Exclusion in Rural Pakistan

Domains	Sr No.	Indicators	Deprivation Cutoff Points
Material Resources	1	What is the wealth of the household?	Per adult household wealth less than 60% of median household wealth
	2	Does the household have less than two acres of agricultural land/no commercial plot?	If answered (Yes)
	3	Does the household have 1 or less buffalo/ camel, 2 or less cattle, 5 or less sheep/goats or 20 or less poultry birds or fish farm?	If answered (Yes)
	4	Is the household jobless?	If answered (Yes)
Education	5	Does the household head (male/female) have low literacy?	If answered (Yes)
	6	Does the household head (male/female) have low numeracy?	If answered (Yes)
	7	Does any member of the household have five years of schooling?	If answered (No)
	8	Does the household have at least one child of school going age (5 to 18 years) who does not go to school?	If answered (Yes)
Health	9	Did one or more children of the household die under the age of five years?	If answered (Yes)
	10	Do household members other than the breadwinner of the household have any illness or disability or have they suffered from an accident?	If answered (Yes)
	11	Does at least one household member have one or more chronic diseases (diabetes, heart, asthma, cancer, etc.)?	If answered (Yes)
Living Standard	12	Does the household have electricity?	If answered (No)
	13	Does the household have access to clean drinking water?	If answered (No)
	14	Does the household have access to adequate sanitation?	If answered (No)
	15	Does the house have a dirt floor?	If answered (Yes)
	16	Does the household use dirty cooking fuel?	If answered (Yes)

Financial hardship	17	Does the household have any savings?	If answered (No)
	18	Has any household member taken or tried to take a loan in the last 12 months?	If answered (Yes)
Economic Shocks	19	Has the breadwinner of the household died?	If answered (Yes)
	20	Has their livestock been stolen or has there been a livestock epidemic?	If answered (Yes)
	21	Does the breadwinner of the household have any illness or disability or has he/she suffered from an accident?	If answered (Yes)
	22	Has there been a loss of harvest due to reasons other than natural calamities?	If answered (Yes)
Personal safety	23	How safe do you feel when visiting the neighbors' house?	Unsafe/Very Unsafe
	24	How safe do you feel when visiting the neighboring village?	Unsafe/Very Unsafe
	25	How safe do you feel when visiting the neighborhood market?	Unsafe/Very Unsafe
	26	How safe do you feel when travelling to the main city in the district?	Unsafe/Very Unsafe
	27	How safe do you feel when participating in religious events/processions?	Unsafe/Very Unsafe
Social & political participation	28	Did you vote in the previous general elections (2008)?	If answered (No)
	29	Have you ever attended a village meeting?	Never participated
	30	Who was the Prime Minister of Pakistan before the caretaker government (2008)?	Not correct
	31	Who was the Chief Minister of [name of respondent's province] before the caretaker government (2008)?	Not correct
	32	Are you a member of any of the following political or civic organizations (farmers group, cooperative, local Panchayat / Jirga, political group, any other)?	If answered (No)

household A is deprived in only income and wealth, then  $x_{materialresource} = \frac{1+1+0+0}{4} = 0.5$ . Each life domain deprivation score varies between zero and one, where one means maximum deprivation/social exclusion in its respective domain and zero means no exclusion. The overall total deprivation score for household A varies between zero and eight. Furthermore, these scores have been converted into a linear scale with five intervals to measure the degree of severity of social exclusion in sustainable development.

### 2.4. Assigning scale value

To measure the several levels of social exclusion in sustainable development indicators, this study has divided the overall score into five intervals on a linear scale. Figure 1 shows the five intervals of severity. The interval 0 to 1 means less severe, 1 to 2 means mediocre severe, 2 to 3 means moderate severe, 3 to 4 means severe and scale 4 and above means more severe.

## 3. Results and Discussion



Figure 1: Social Exclusion Linear Scale

Social exclusion at the ethnic, provincial and national levels are presented in the following subsections.

### 3.1. Descriptive statistics

This study explores the situation of social development in rural Pakistan. The deprivation of aspects of life given as social development indicators drives the household into social exclusion. Furthermore, socially excluded individuals or groups cannot participate in social, economic and political activities, which leads to paralyzed socioeconomic development at the community and individual levels. As a result, social and economic development goes down and illegal activities such as terrorism, street crime, violence and community level exploitation and corruption go up. Table A1 shows the descriptive statistics of deprivation percentage with respect to each indicator. It indicates that 40% households in rural Pakistan are deprived or have less than 60% of median wealth, 76% households have less than two acres agricultural land/no commercial plot, 30% households do not have 1 or more buffalo/camel, 2 or more cattle, 5 or more sheep/goats or 20 or more poultry birds or fish farm, 74% households have at least one member who does not have five years of schooling, 50%

households have at least one child of school going-age (5 to 18 years) who does not go to school, 49% households have at least one household member who has a chronic disease (diabetes, heart disease, asthma, cancer, etc.), 84% households do not have access to clean drinking water, 40% households do not have toilet facilities, 79% households do not have any savings and more than 50% households do not have any interest in social and political activities in rural Pakistan.

### **3.2. Social exclusion at the ethnic level in rural Pakistan**

In rural Pakistan, the major ethnic groups are Punjabis, Sindhis, Balochis, Saraikis, Pakhtuns and Hazarwals. These ethnic groups are different from each other because of their culture and linguistic identities, and they live in Punjab, Sindh, KP and Balochistan provinces of Pakistan. Most Punjabis live in Punjab, Sindhis live in Sindh, Balochis live in Balochistan and Pakhtuns and Hazarwals live in KP.

Social exclusion at the ethnic level in rural Pakistan shows that Punjabi (10%), Sindhi (17%), Saraiki (12%), Balochi (20%), Pakhtun (3%) and Hazarawal (2%) rural households are more deprived (more severe) in social development indicators and face social exclusion in material resources, health, education, living standard, financial hardship, economic shocks, food and personal security, etc. The comparison of social exclusion severity between ethnic groups illustrates that Punjabi, Pakhtun and Hazarawal ethnic households are less socially excluded in social development process as compared to Sindhi, Saraiki and Balochi rural households. More than 60% rural households in Punjabi, Pakhtun and Hazarawal ethnic groups are mediocre and moderate in social exclusion. In contrast, less than 40% of Sindhi, Saraiki and Balochi rural households are living in mediocre and are moderate in social exclusion. These results suggest that Sindhis, Saraikis and Balochis have less access to material resources, health, education, living standard, personal safety, social and political participation, etc. as compared to Punjabis, Pakhtuns and Hazarawals in their respective provinces. The Punjabi, Sindhi and Pakhtuns ethnic groups are more dominant in social and political structures of their respective provinces. For example, Punjabis are more dominant in the social and political structures of Punjab and occupy most of the powerful positions in the state and are followed by Sindhis in Sindh and Pakhtuns in KP (Rehman, 1997). As previously mentioned, most Saraikis, Balochis and Sindhis live in South Punjab, rural Sindh and Balochistan. The regions South Punjab and rural Sindh are more deprived in health, education and living standard. Poverty research on a regional level shows that the situation of social deprivation/poverty in South Punjab is very pathetic as compared to Central or North Punjab. Poverty reduced significantly in 2004 and 2010 in Central or North Punjab but significantly increased in South Punjab and rural Sindh (Arif & Farooq, 2014). In these sub-regional deprived

areas, households have poor physical infrastructure (Arif, Iqbal, & Shujaat, 2011), less diversification in agricultural resources and high-income inequality (Malik, 2005).

The main reason behind the deprivation of Saraiki, Balochi and Sindhi ethnic groups is their tribal and feudal systems under poor educational and health infra-

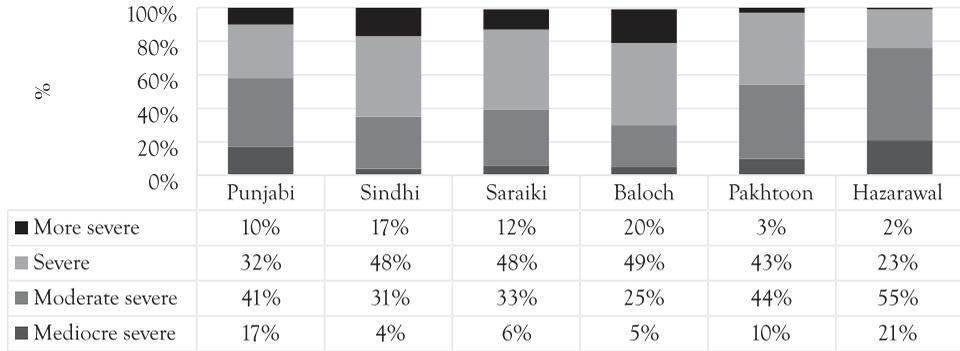


Figure 2: Social Exclusion at Ethnic Level in Pakistan

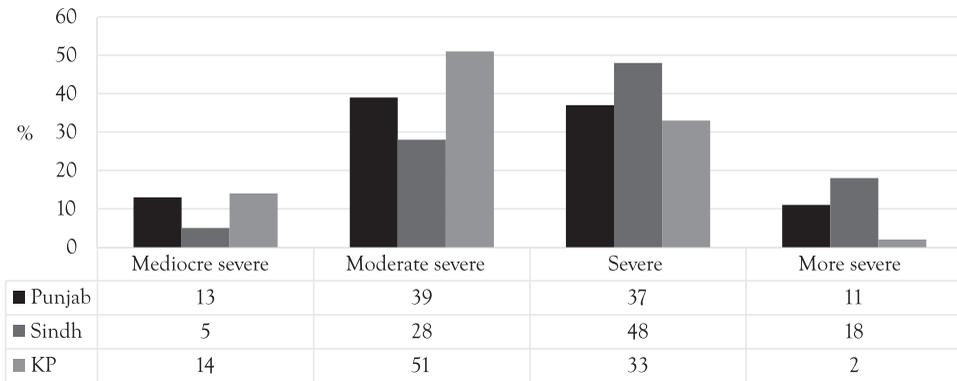
structure, less urbanization, poor market integration, less economic development and low employment opportunities. In these systems, a Sardar or Wadera at the regional, sub-regional and community level determines the fundamental rights of their local community, economic resources, education, health, social and political decision-making. Due to these situations, people cannot completely partake in socio-economic activities such as education, health and income generation. Moreover, these Sardars and Waderas are not completely introduced to their local issues on the floor of federation and provincial levels. Due to the ignorance and dishonesty of Sardars/Feudals, most of the federal and provincial development budget is utilized in the influence of ethnic areas and these underdeveloped areas remain further deprived and marginalized in socioeconomic indicators, i.e. education, health, living standard and employment (Majeed, 2000); (Rehman, 1997) and (Shehzad, 2011).

### 3.3. Social exclusion at the rural provincial and intra provincial level

Social exclusion comparisons between rural households in different provinces are presented in Figure 3. Provincial level analysis helps the local and provincial governments allocate their resources to address social exclusion and social development policies in particular areas at the grassroots level. The social exclusion index depicts that 48% households in rural Punjab, 66% households in rural Sindh and 35% households in rural KP are living in the severe and more severe categories of social exclusion. These deprived households are deficient in social development indicators, i.e. material resources, education, health, living standard, personal safety, and social

and political participation. However, the PRHS 2013 survey results show that rural households in Punjab and Sindh are more marginalized as compared to KP. According to the recent analysis of multidimensional rural poverty, the rural province Sindh and South Punjab regions have the highest number of poor people, whereas the rural population of KP is the wealthiest as compared to that of Punjab and Sindh (Padda & Hameed, 2018).

Table 2 presents intra-provincial level social exclusion. These results show that



**Figure 3:** Social Exclusion in Rural Provincial Level

Punjabi ethnic rural households are less deprived in social development indicators as compared to the Sindhi, Pakhtun, Balochi and Saraiki households living in Punjab. The comparison between Sindhi, Pakhtun, Balochi and Saraiki rural households in Punjab shows that Balochi (70%) and Saraiki (62%) rural households in Punjab are more deprived in social development. They live in the south of Punjab. South Punjab consists of 4 administrative divisions and 11 districts. Out of a population of 110 million, approximately 29% of the population lives in South Punjab. Most people of South Punjab are engaged in agriculture; main crops are sugarcane, cotton, wheat and maize. Fruits and vegetables are also being increasingly grown in these areas<sup>3</sup>. Unfortunately, South Punjab districts are more deprived in basic health, education, access to clean drinking water and sanitation as compared to Central and North Punjab (Padda & Hameed, 2018). Similarly, South Punjab districts have a lack of infrastructure in health, education, industry and social development, which is critical to accessing material resources, social and political investment.

Results from the province Sindh indicate that local Sindhi, Balochi and Saraiki rural households are more deprived in Sindh. Nearly, 48% of Sindh's population lives in rural areas and the main sources of rural households' income are based on

3 <http://www.dnaneews.com.pk/economic-deprivation-and-its-impact-on-extremism-in-south-punjab/>

**Table 2:** Social Exclusion at Intra-Provincial Level

Punjab				
Ethnicity	Mediocre severe	Moderate severe	Severe	More severe
	%	%	%	%
Punjabi	17	42	32	10
Sindhi	0	100	0	0
Pakhtun	9	44	34	13
Balochi	10	20	55	15
Saraiki	6	34	48	13
Sindh				
Punjabi	0	0	100	0
Sindhi	4	30	48	17
Pakhtun	18	45	36	0
Balochi	2	28	45	25
Saraiki	13	25	53	10
KP				
Pakhtun	8	44	48	0
Hazarawal	21	55	23	2

agriculture and its allied activities (GoP, 2017). A large number of the rural population faces social development deprivation and well-being issues. Additionally, a report on multidimensional poverty published by the government of Pakistan in 2016 in collaboration with the Oxford Poverty and Human Development Initiative (OPHI) and the United Nations Development Programme (UNDP) demonstrates that 41.5% of the rural population endures multidimensional deprivation in rural Sindh (GoP, 2016b) in areas such as poor education, health and living standard. In KP, Pakhtuns and Hazarawals are the two main ethnic groups and Pakhtuns are more deprived than Hazarawals in KP because most Hazarawal communities are living abroad and they send enough remittances to their families living in Pakistan. In contrast, Pakhtun communities consist of households with a large number of household members having limited economic resources, less education, poor health, lack of access to clean drinking water, clean energy and sanitation. Due to these deprivations, rural households face social and economic problems at the regional level such as terrorism, street crime, violence and social exclusion.

### 3.4. Social exclusion at rural Pakistan level

Pakistan is the sixth highest populated country and has set a goal for its population of 207.8 million: to reduce poverty levels by half in all its forms by 2025 (GoP, 2016a). Nearly 63% of Pakistan's population lives in rural areas. The main sources of rural households' income are based on agriculture, industry and its allied activities (GoP, 2014). A large amount of Pakistan's rural population faces social development deprivation and well-being issues. The official statistics demonstrate that material poverty in rural Pakistan has decreased in the previous years (GoP, 2016c). However, various empirical studies have asserted that rural poverty has not decreased (Malik, 2005; Kemal, 2003; World Bank, 2002). Multidimensional poverty analysis carried out by the Government of Pakistan shows that 54.6% of Pakistan's rural population endures multidimensional deprivation in health, education and living standard. The results from this study indicate that a significant number of rural households face deprivations in wealth, education, health, access to clean drinking water, sanitation and household saving. However, PRHS 2013 results indicate that only 37% household members have taken or tried to take a loan in the last 12 months. According to literature, most rural micro-financing institutes have transformed into commercial institutes and are doing well by making profits and enhancing their scale of operations. However, poverty alleviation and social development are not the principal objectives of these institutions (Montgomery & Weiss, 2005). The other problem at the community level is less social mobilization and communication between different communities at the village level. The results from this study demonstrate that 82% households have never attended a village level meeting (See Table A1 in Annex). The social exclusion severity at the rural level shows that 52% of Pakistan's rural households face deprivation and the overall social exclusion score is above 3, where the overall score categories vary between 0 and 5, 0 indicates minimum social exclusion and 5 indicates maximum social exclusion. These results indicate that around half of the rural population of Pakistan is deprived in social development indicators, i.e. wealth, income, agriculture resources, health, education, financial hardship, economic shocks, personal safety, and social and political participation. The depth of social exclusion shows that the score of 38% households varies between score 2 to 3 and the score of only 0.1% households in rural Pakistan varies between 0 to 1 (Figure.4).

Table 3 presents the decomposition of social exclusion scores by life domains. These scores vary between 0 and 1 and determine the depth of social exclusion by life domains, where 0 indicates the minimum level of social exclusion and 1 indicates the maximum level. Decomposition results show that 54% households in rural Pakistan have a social exclusion score between 0.5 to 1 in material resources such as wealth, agriculture and livestock and employment. Agriculture and livestock are

the dominant sectors for basic food and cash earning in rural Pakistan. It is a crucial sector of the rural economy and a driver of socioeconomic development, because it is a vital source of rural cash earnings for poor and marginalized families, where 8 million households/families are involved and earn more than 35% of their income from livestock activities (GoP, 2016-17). The education, health and living standard are imperative indicators of social and human development for any nation. The situation of these indicators in rural Pakistan is not remarkable in any domain except in health. Health indicators are better than those of education and living standard in rural Pakistan because of provincial government, international and national development agencies efforts. These results also indicate that financial hardship and social and political participation in rural Pakistan is pathetic because 87% households are in financial hardship and 69% are deprived in social and political participation. Financial hardship is a major barrier in achieving the poverty and social development goals, as it harmfully influences affordability for basic needs such as education, health, food

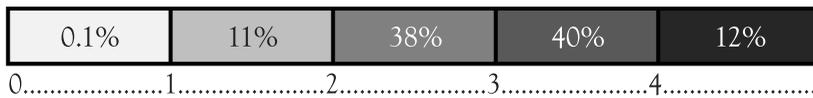


Figure 4: Social Exclusion in Rural Pakistan

Table 3: Social Development Indicator Status in Rural Pakistan

Domains	Social Exclusion Score Range					
	0	0.1 up to 0.25	0.25 up to 0.50	0.50 up to 0.75	0.75 up to 1	1
Material Resources	19	0	27	39	14	1
Education	11	0	26	24	22	17
Health	46	0	46	7	0	0
Living Standard	0	8	28	30	27	8
Financial Hardship	13	0	0	58	0	29
Economic Shocks	82	0	17	1	0	0
Personal Safety	80	15	4	1	0	0
Social & Political Participation	0	7	24	24	37	8

and living standard.

#### 4. Conclusions and Implications

This study estimated social exclusion deprivation levels for the rural population

of the 3 provinces of Pakistan by using data from PRHS 2013 and applying the sum score approach. The dimensions of deprivation have been identified by using the following factors: material resources, education, health, living standard, financial hardship, economic shocks, personal safety, social and political participation. This study finds that 52% of the households in rural Pakistan live in the severe and more severe conditions of social exclusion in the above mentioned social development indicators (see Figure. 3). Evidence at the provincial and ethnic levels shows that households in rural Sindh are more deprived than households in rural Punjab and KP. The ethnic groups Punjabis, Sindhis, Saraikis, Balochis and Pakhtuns are all deprived at certain levels in their respective provinces. However, Saraiki households are more deprived than Punjabi households in rural Punjab and Sindhi households in rural Sindh (see Figure.2 & 3). Socioeconomic policies aimed at reducing social exclusion must also focus on improving material resources, health, education and financial hardships along with reducing sub-regional level inequalities through pro-rural development. Moreover, social development is highly correlated with socioeconomic and well-being issues. This study suggests that policy makers and government institutions should need the most updated data to modify their policies. The income of the majority of the rural population is based on agriculture and livestock. These are crucial sectors of the rural economy and can serve as an impetus for socioeconomic development, because these are vital sources of rural cash earnings for poor and marginalized families. Therefore, agriculture and livestock policies should be considered to improve the income of the poor and marginalized. Overall, the study calls for a multidimensional policy approach that targets social exclusion reduction at the regional and ethnicity levels.

## References

- Alkire, S., & Seth, S. (2009). *Measuring multidimensional poverty in India: A new proposal*. OPHI working paper no. 15. Oxford Poverty & Human Development Initiative (OPHI), Oxford Department of International Development Queen Elizabeth House (QEH), University of Oxford.
- Arif, G., & Farooq, S. (2014). Rural poverty dynamics in Pakistan: Evidence from three waves of the panel survey. *The Pakistan Development Review*, 53(2), 71-98.
- Arif, G., Iqbal, N., & Shujaat, F. (2011). *The persistence and transition of rural poverty in Pakistan, 1998-2004*. PIDE working papers series 74. Islamabad: Pakistan Institute of Development Economics.
- Atkinson, A. B. (1998). Social exclusion, poverty and unemployment. In A. B. Atkinson, & J. Hills (Eds), *Exclusion, employment and opportunity*. (pp. 1-20). London: London School of Economics.
- Carraro, L., Weinzierl, S., & Hunt, S. (2004). *A quantitative assessment of social exclusion in Pakistan*. Oxford: Oxford Policy Management Group.
- Chakravarty, S. R., & D'Ambrosio, C. (2006). The measurement of social exclusion. *Review of Income*

and wealth, 52(3), 377-398.

- Dempsey, N., Bramley, G., Power, S., & Brown, C. (2011). The social dimension of sustainable development: Defining urban social sustainability. *Sustainable development*, 19(5), 289-300.
- Duffy, K. (1995). *Social exclusion and human dignity in Europe: Background report for the proposed initiative by the Council of Europe*. Strasbourg, France: Council of Europe.
- Emas, R. (2105). *The concept of sustainable development: Definition and defining principles*. Florida International University.
- Hameed, A., & Padda, I. u. (2017). *Multidimensional child poverty measurement and its mapping: Case of Balochistan, Pakistan*. Paper presented at the 33rd annual conference of the Pakistan Society Development Economists. Islamabad: Pakistan Institute of Development Economics.
- Hameed, A., Padda, I. U., & Dahar, M. A. (,2017). *Micro-supply capacity assessment and quality of education for the public sector schools in Punjab, (Pakistan)*. Paper presented at the 2nd international conference on Research and Practices in Education, Pakistan. Islamabad: Allama Iqbal Open University.
- Holden, E., Linnerud, K., & Banister, D. (2017). *The imperatives of sustainable development: needs, justice, limits*. Routledge.
- Hopwood, B., Mellor, M., & O'Brien, G. (2005). Sustainable development: Mapping different approaches. *Sustainable development*, 13(1), 38-52.
- Kabeer, N. (2006). *Social exclusion and the MDGs: The challenge of 'durable inequalities in the Asian Context*. Paper presented at the Asia 2015 conference on Promoting Growth, Ending Poverty. Brighton: University of Sussex.
- Kemal, A. (2003). *Agriculture growth and rural poverty in Pakistan: A Regional Analysis*. A Background Paper for the Rural Factor Markets in Pakistan: A Project of the World Bank.
- Levitas, R., Pantazis, C., Fahmy, E., Gordon, D., Lloyd, E., & Patsios, D. (2007). *The multi-dimensional analysis of social exclusion*. Bristol: Department for Communities and Local Government.
- Mahmood, B., Sohail, M. M., Mushtaq, S. K., & Rizvi, S. A. (2014). Social factors hindering political participation in Pakistan: A review article. *Mediterranean Journal of Social Sciences*, 5(23), 1933.
- Majeed, G. (2010). Ethnicity and ethnic conflict in Pakistan. *Journal of Political Studies*, 1(2), 51-63.
- Malik, S. (2005). *Agricultural growth and rural poverty: A review of evidence*. Working paper series. Asian Development Bank, Islamabad.
- Montgomery, H., & Weiss, J. (2005). Great expectations: Microfinance and poverty reduction in Asia and Latin America. *Oxford Development Studies*, 33(3-4), 391-416.
- Naveed, A., & Islam, T. U. (2012). *A new methodological framework for measuring poverty in Pakistan*. Islamabad: Sustainable Development Policy Institute.

- Padda, I. U., & Hameed, A. (2018). Estimating multidimensional poverty levels in rural Pakistan: A contribution to sustainable development policies. *Journal of Cleaner Production*, 197, 435-442.
- Rahman, T. (1997). Language and ethnicity in Pakistan. *Asian Survey*, 9, 833-839.
- Scutella, R., Wilkins, R., & Horn, M. (2009). *Measuring poverty and social exclusion in Australia: A proposed multidimensional framework for identifying socioeconomic disadvantage*. Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.
- Scutella, R., Wilkins, R., & Kostenko, W. (2009). *Estimates of poverty and social exclusion in Australia: A Multidimensional Approach*. Melbourne institute working paper series 1. Melbourne Institute of Applied Economic and Social Research, The University of Melbourne.
- Sen, A. (1976). Poverty: an ordinal approach to measurement. *Econometrica: Journal of the Econometric Society*, 44(2), 219-231.
- Shawar, D., & Asim, M. (2012). Voting behavior of people towards different political parties in district Faisalabad. *Journal of Social Sciences*, 3(2), 85-91.
- Shehzad, A. (2011). The issue of ethnicity in Pakistan: Historical background. *Pakistan Vision*, 12(2), 124.
- Silver, H. (2015). *The contexts of social inclusion*. DESA working paper no. 144. Department of Economic & Social Affairs, Brown University.
- World Bank. (2002). *Poverty in Pakistan: Vulnerabilities, social gaps and rural dynamics*. The World Bank, Washington D.C.

## Appendix

**Table A1: Deprivation Status of Indicators**

Sr No.	Indicators	Deprivation Status	
		%	N
1	What is the wealth of the household?	40	782
2	Does the household have less than two acres of agricultural land/no commercial plot?	76	1470
3	Does the household have 1 or less buffalo/ camel, 2 or less cattle, 5 or less sheep/goats or 20 or less poultry birds or fish farm?	30	575
4	Is the household jobless?	3	52
5	Does the household head (male/female) have low literacy?	52	1005
6	Does the household head (male/female) have low numeracy?	33	641
7	Does any member of the household have five years of schooling?	74	1428
8	Does the household have at least one school going-age (5 to 18 years) who does not go to school?	50	975
9	Did one or more children of the household die under the age of five years?	3	55
10	Do the household members other than the breadwinner of the household have any illness or disability or have they suffered from an accident?	9	179
11	Does at least one household member have one or more chronic diseases (diabetes, heart, asthma, cancer, etc.)?	49	958
12	Does the household have electricity?	12	239
13	Does the household have access to clean drinking water?	84	1624
14	Does the household have access to adequate sanitation?	40	772
15	Does the house have a dirt floor?	64	1232
16	Does the household use dirty cooking fuel?	100	1936
17	Does the household have any savings?	79	1525
18	Has any household member taken or tried to take a loan in the last 12 months?	37	714
19	Has the breadwinner of the household died?	1	20
20	Has their livestock been stolen or has there been a livestock epidemic?	11	212
21	Does the breadwinner of the household have any illness or disability or has he/she suffered from an accident?	5	91
22	Has there been a loss of harvest due to reasons other than natural calamities?	2	30

23	How safe do you feel when visiting the neighbors' house?	0.3	5
24	How safe do you feel when visiting the neighboring village?	2	31
25	How safe do you feel when visiting the neighborhood market?	1	18
26	How safe do you feel when travelling to the main city in the district?	10	188
27	How safe do you feel when participating in religious events/processions?	15	281
28	Did you vote in the previous general elections (2008)?	16	303
29	Have you ever attended a village meeting?	82	1578
30	Who was the Prime Minister of Pakistan before the caretaker government (2008)?	66	1279
31	Who was the Chief Minister of [name of respondent's province] before the caretaker government (2008)?	51	993
32	Are you a member of any of the following political or civic organizations (farmers group, cooperative, local Panchayat / Jirga, political group, any other)?	100	1936