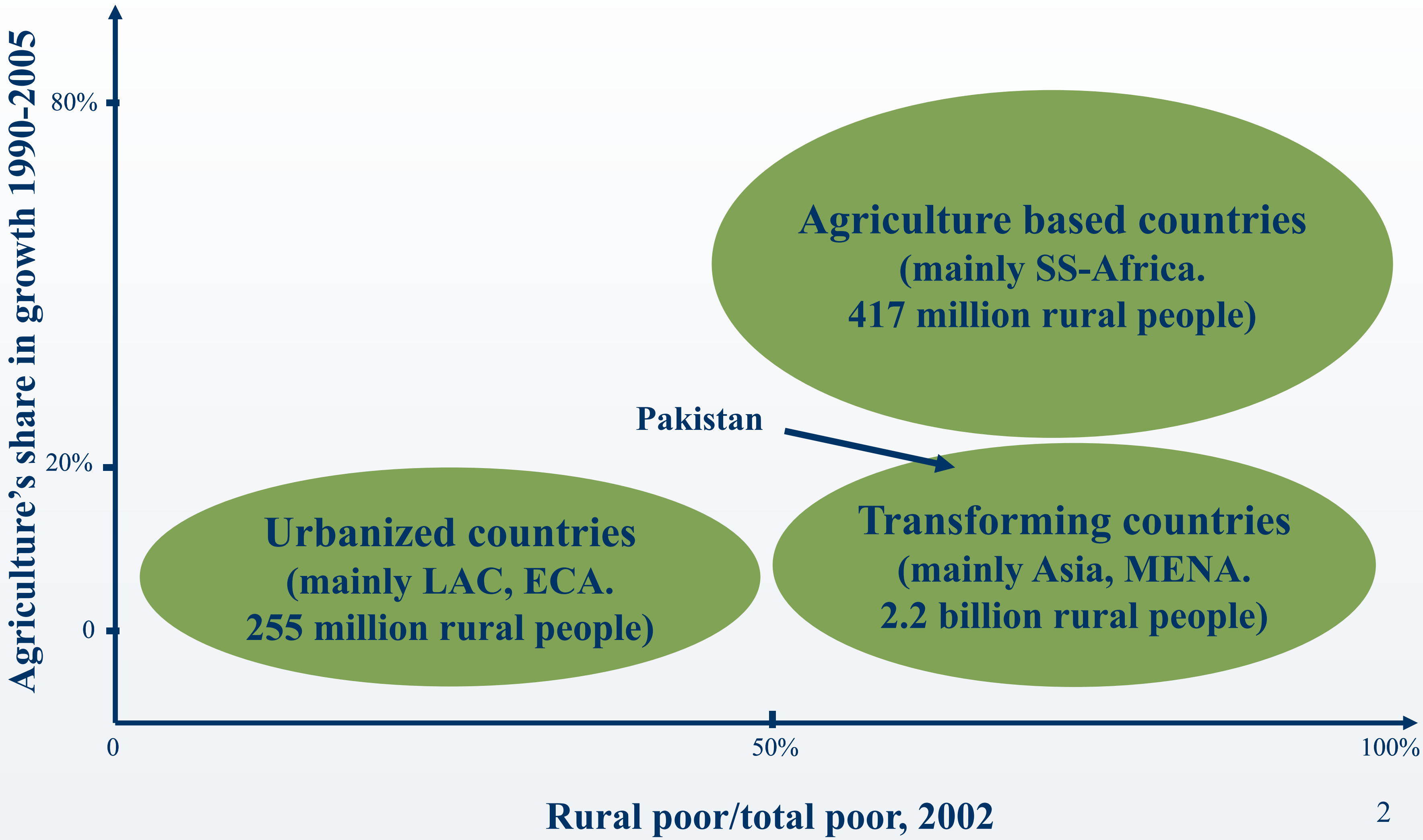
Small Farming in Pakistan: Issues and Challenges

Umar Farooq, Ph.D.
PARC, Islamabad, Pakistan

4th Meeting of the COMCEC Agriculture Working Group
Ankara, Turkey
25th September 2014

Agriculture's Functions in Three Worlds

Source: WDR, 2008



Back

Pakistan's Position in World Agriculture

- **Wheat** --- 8^{th} largest, comparative advantage in import scenario; Irrigated areas (96%), Rainfed areas (4%)
- **Cotton** --- 4^{th} largest; Major export and agro-industrial crop; Longest value chain + employment + edible oil; irrigated
- **Livestock** --- Rank in top 15 most populous countries of the world
  - 2^{nd} in buffalo; 13^{th} in cattle; 9^{th} in sheep pop.; 3^{rd} in goats pop.
- **Rice** --- 11^{th} largest; Comparative advantage in basmati and some coarse varieties under export scenario, irrigated areas (100%)
- **Sugarcane** --- 5^{th} largest; Comparative advantage in import scenario; irrigated areas (100%)
- **Pulses** --- no position; heavy imports; Irrigated, Rainfed
- **Fruits** --- no position, Comp. advantage in many fruits & Kinnow is our specialty
- **Vegetables** --- no position; Comp. advantage in potato by Punjab Irrigated, Rainfed areas

Farms and Farm Area Composition - Pakistan

Farm Size Groups	Farms Composition (%) (Average Farm Size (Acres))					Farm Area Composition (%) (Average Wheat Area (Acres))				
	1972	1980	1990	2000	2010	1972	1980	1990	2000	2010
Marginal (upto 2 Ha)	28.2 (2.4)	34.1 (2.4)	47.4 (2.2)	57.6 (2.1)	64.7 (1.9)	5.2 (1.1)	7.0 (1.4)	11.2 (1.3)	15.5 (1.3)	19.2 (1.4)
Small (2 to 5 Ha)	39.9 (8.2)	39.4 (8.0)	33.5 (7.7)	28.1 (7.6)	24.8 (7.4)	25.1 (3.4)	27.3 (3.8)	27.6 (3.9)	27.9 (4.2)	28.8 (4.7)
Medium (5-10 Ha)	21.1 (16.5)	17.3 (16.5)	12.3 (16.4)	8.8 (16.6)	6.8 (16.7)	26.6 (5.9)	24.7 (6.5)	21.6 (7.1)	19.1 (7.8)	17.7 (9.2)
Large (10-20 Ha)	7.7 (31.9)	6.5 (31.8)	4.7 (31.5)	3.9 (31.5)	2.6 (31.9)	18.8 (9.8)	17.8 (10.5)	15.8 (11.8)	16.3 (12.5)	12.7 (15.3)
Landlords (> 20 Ha)	3.2 (100)	2.7 (99.1)	2.1 (105)	1.6 (99.9)	1.1 (122.7	24.2 (19.4)	23.2 (24.5)	23.7 (28.1)	21.2 (25.5)	21.5 (30.6)

Source: Agriculture Censuses, Various Issues

Cropping Patterns by Farm Size Groups (% Cropped Area)

Crop types	Marginal (upto 2 Ha)	Small (2 - 4 Ha)	Medium (5 -10 Ha)	Large (10-20 Ha)	Landlord (> 20 Ha)	All Pakistan
Wheat	43.3	41.2	40.5	39.0	35.6	40.4
Rice	11.0	14.1	12.3	12.3	11.1	12.5
Cotton	12.3	13.4	15.1	14.1	14.0	13.7
Maize	8.7	3.5	1.9	1.6	1.7	3.7
Sugarcane	3.0	3.9	3.7	3.7	4.9	3.8
Potato	0.3	0.3	0.4	0.4	0.9	0.4
Oil Seeds	0.9	1.8	2.3	2.4	2.7	1.9
Pulses	1.7	3.3	6.1	9.4	11.3	5.4
Fodder	12.0	11.8	10.6	9.2	6.9	10.6
Vegetables	1.7	1.7	1.9	2.1	3.4	2.0
Orchard	1.1	1.1	1.5	1.6	4.0	1.6

Source: Agriculture Census, 2000

Area Planted per Farm (Ac.)

Crop types	Marginal (upto 2 Ha)	Small (2 - 4 Ha)	Medium (5 -10 Ha)	Large (10-20 Ha)	Landlord (> 20 Ha)	All Pakistan
Wheat	1.7	5.1	9.8	16.5	37.4	4.4
Rice	1.7	4.5	8.3	14.9	34.4	4.5
Cotton	1.8	4.7	8.7	15.5	39.9	4.9
Maize	1.2	3.2	4.7	6.7	14.8	1.9
Sugarcane	1.2	2.1	3.3	6.0	17.3	2.6
Potato	0.7	2.0	4.1	5.9	22.1	2.4
Oil Seeds	0.9	1.9	3.0	4.9	12.7	2.5
Pulses	1.3	3.4	7.5	14.0	36.0	6.3
Fodder	1.2	2.5	3.8	5.8	11.2	2.4
Vegetables	1.0	2.0	3.2	4.9	14.1	2.4
Orchard	1.1	2.5	4.1	5.0	18.7	3.4

Source: Agriculture Census, 2000

Status of Commerce in Agri. Commodities

Commodities/Groups	Policy	Price situation	Government intervention	Implications
Wheat	Support price	Below and above	Highest	- Subsistent farmers not benefited - High costs to public exchequer - Resource misallocation
Rice	Support price	Less fluctuate	Minimum	- Farmers more exposed to changes in international market - High costs to public exchequer
Sugarcane	Support price	Always higher than SP	Least	- Miss-allocation of resources on farmers' part - Water use/pumping implications
Cotton	Support price	International market	Least	- Recent developments in Bt cotton are directly affecting food security - Fake Bt cotton is affecting farmers and cotton economy of Pakistani
Potato	Laissez fair	Market	None	- Wide price fluctuations
Fruits/Veg.	Laissez fair	Market	None	- Wide price fluctuations
Livestock	Meat price	Market	None	- Prices rising regularly

Small Farming Issues

- Small marketable surpluses available
- Low capital and other resources available
- Late adopters in many technologies, e.g. seed, machinery
- Food security concerns always dominate in farm plans
- Increasing inclination towards part-time farming due to low insufficient livelihood from agriculture
- High dependence on conventional marketing channels
- Lack of synergies between production and marketing plans
- Highest vulnerability to price seasonality
- Poor resilience strategies to climate and policy changes
- Motivation difficulties for participation in contract farming

THANKYOU

Required vs Prevailing Food Policy Strategies

Required	Prevailing
Proactive to agricultural commodity crisis	Reactive to crisis when it happens
Government intervene only where market fails	Government intervene indiscriminately
Protect price bands between import and export parity prices	Single procurement price of many agricultural commodities
Encourage storage in private sector to control seasonal price fluctuations	Storage is considered an illegal activity and often blamed
Modern marketing facilities should be available in markets	Markets lacking many basic facilities and the quality of existing ones is highly poor

Way Forward -- Contract Farming

- Advantages: shorter supply chains, low transaction costs, price assurance for the farmers, technical backstopping opportunities, knowledge and experience sharing forum
- Precautions: side selling, higher costs of managing the schemes than benefits, difficulties in motivation for participation
- **Other issues**
  - **Farmers' selection problems**
  - **The production of commercial crop must not interfere with issue of food security**
  - **Clustering of farms will minimize the management costs but not always**