



# Trend Assessment of Food Insecurity in Pakistan (2005 to 2011)

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APCAS 2014, Vientiane, Lao



- Objective
- Pakistan HIES Surveys (2005-06 & 2010-11)
- Trend analysis of Food Security & Nutrition Indicators at National & Sub-National level
- Conclusions



# Objective



- To assess the country progress made in achieving the MDG indicator 1.9 (i.e. to reduce the proportion of population below minimum level of dietary energy consumption by half by 2015).
- To study Food consumption pattern at National & Sub-National levels

# Methodologies adopted



- **FAO standard statistical framework for compiling Food Security & Nutrition indicators**
- **Software used: Food Security Module of ADePT developed by FAO and World Bank**
- **Data sets: Pakistan HIES 2005-06 & 2010-11**



# Pakistan Household Income and Expenditure Surveys (HIES) (2005-06 & 2010-11)

# Survey design of HIES



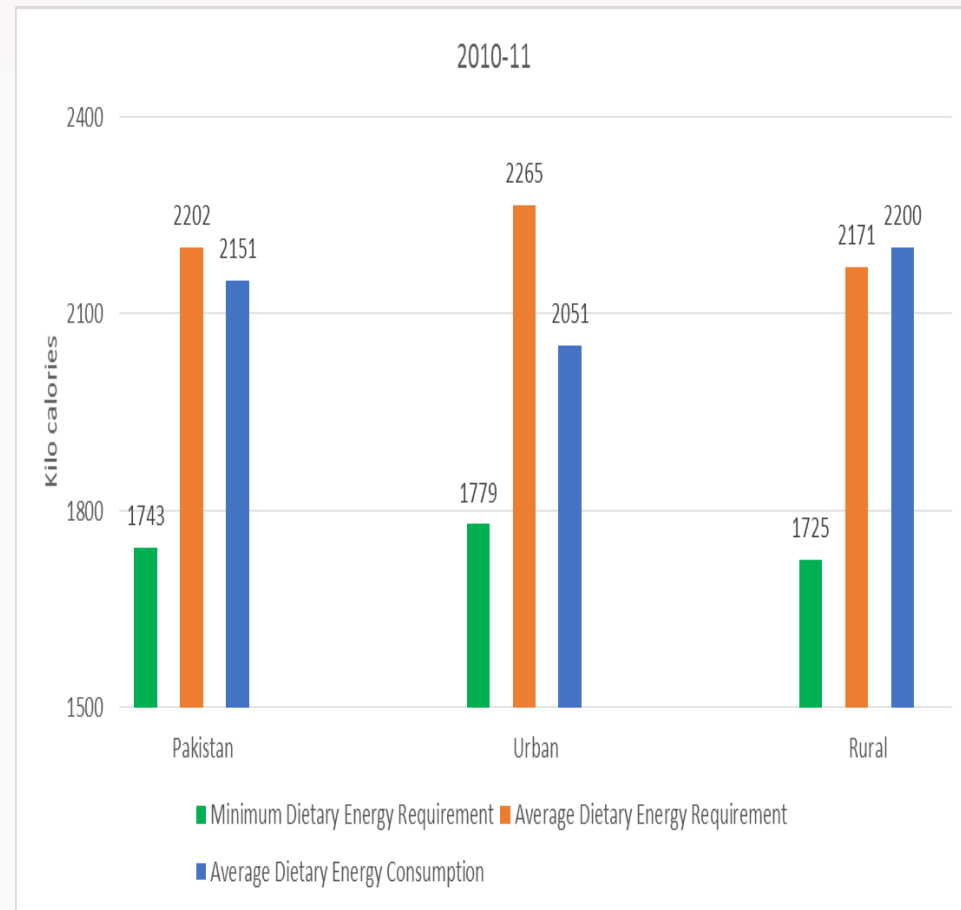
	2005-06	2010-11
<b>Survey Period</b>	July 2005 to June 2006	July 2010 to June 2011
<b>No. of Households</b>		
Urban	6240	6589
Rural	9213	9752
Total	15453	16341
<b>Coverage of Survey (Regions)</b>	04 Provinces (Punjab, Sindh, KPK & Balochistan) Excluding FATA, Gilgit Baltistan & AJK	04 Provinces (Punjab, Sindh, KPK & Balochistan) Excluding FATA, Gilgit Baltistan & AJK
<b>Sampling technique</b>	2 stage stratified sampling	2 stage stratified sampling

# HIES Food Consumption Data



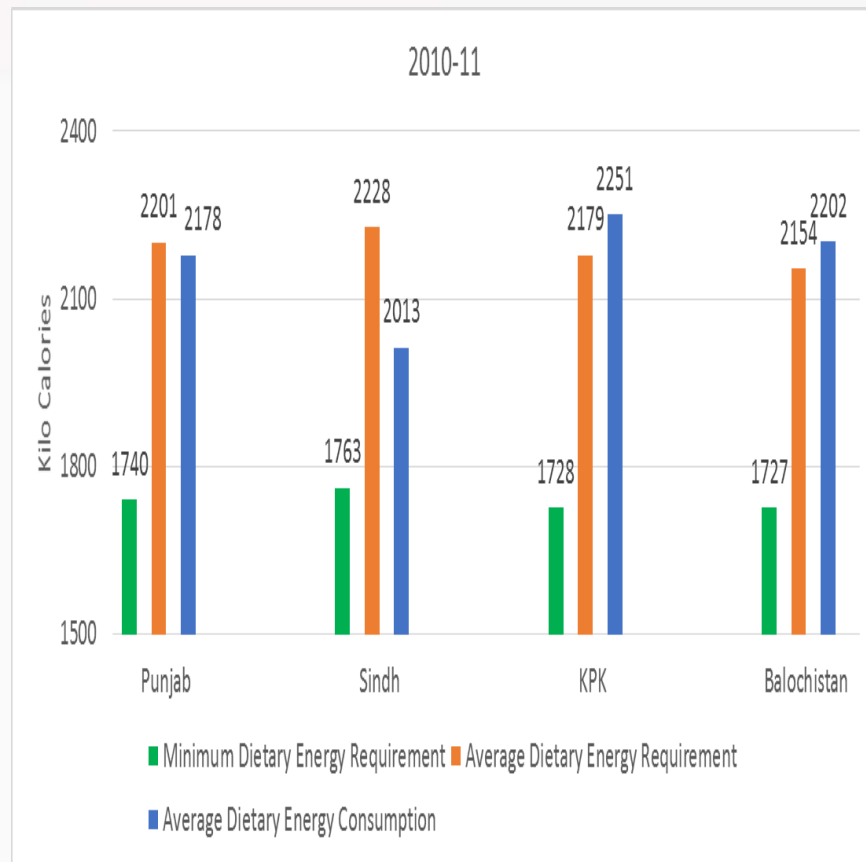
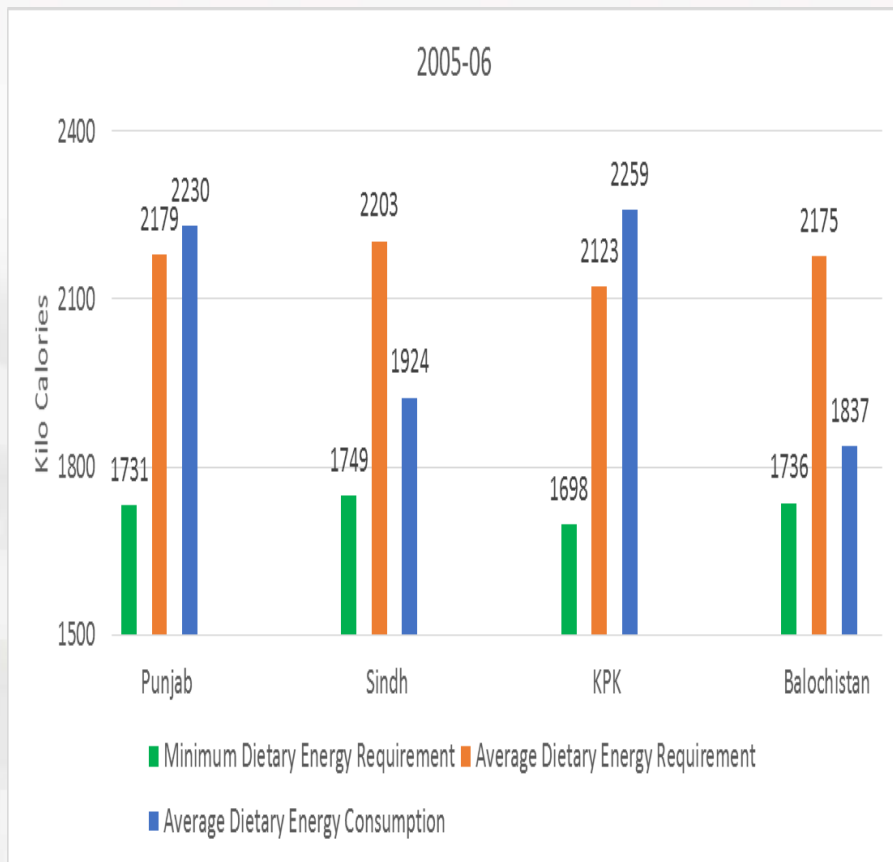
- **Number of Food Items:** 68
- **Reference period of food data:**
  - Last 14 days for Essential daily use items (Milk, Meat, Vegetables, Fruits, Food taken away from home etc.)
  - Last one month for non-perishable food items (Wheat, Rice, Pulses etc.)
- **Quantities:** (Grams, Kg, Litre, Number)  
(All unit of measurements were converted in gm for food security analysis)
- **Monetary values** in Pakistani Rupee
- **Data collection:** Through direct interview

# Trends of Dietary Energy (Kcal/person/day)





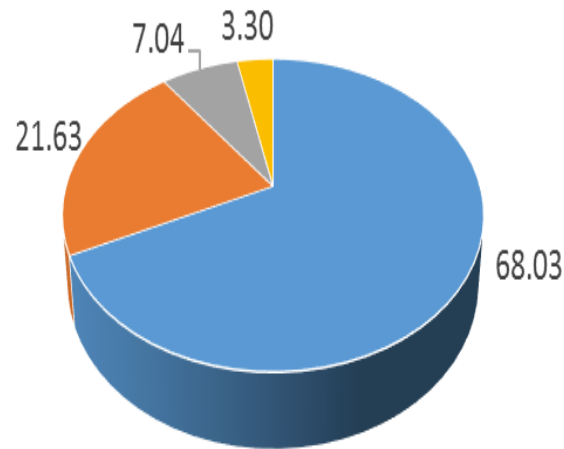
# Trends of Dietary Energy (Kcal/person/day) by Region (2005-06 & 2010-11)



# How Food is acquired? (% share in dietary energy)

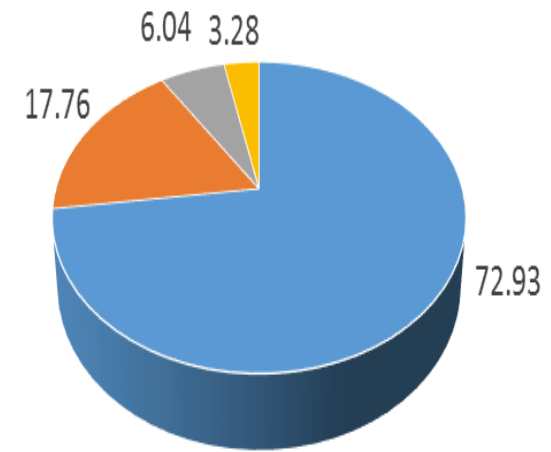


Pakistan (2005-06)



- Purchased & Consumed
- Own produced & Consumed
- Consumed away from home
- Other Sources

Pakistan (2010-11)

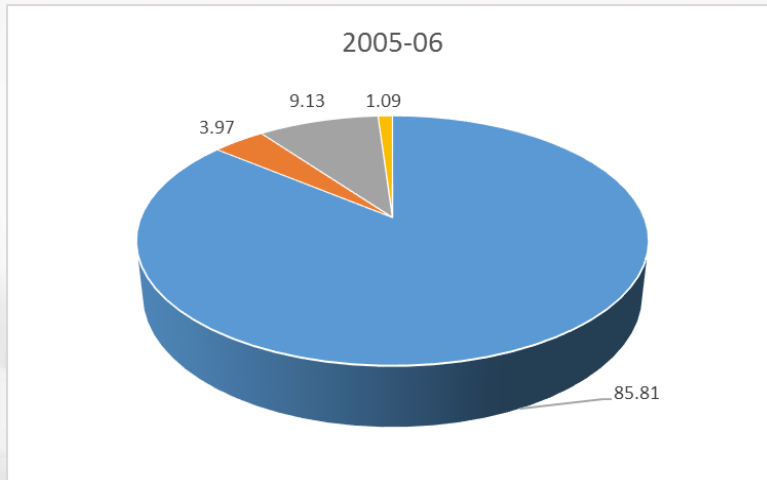


- Purchased & Consumed
- Own produced & Consumed
- Consumed away from home
- Other Sources

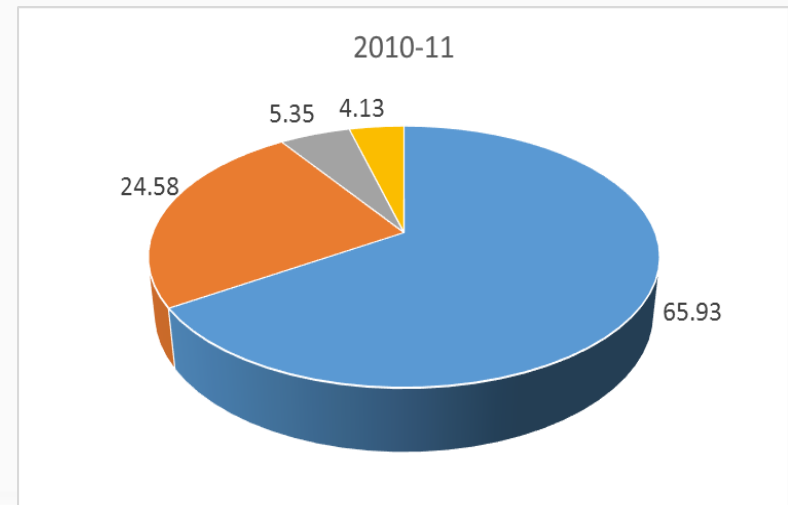
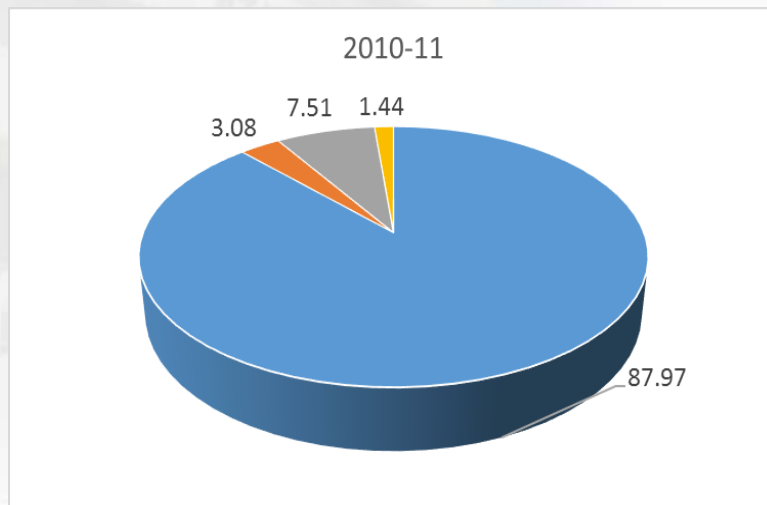
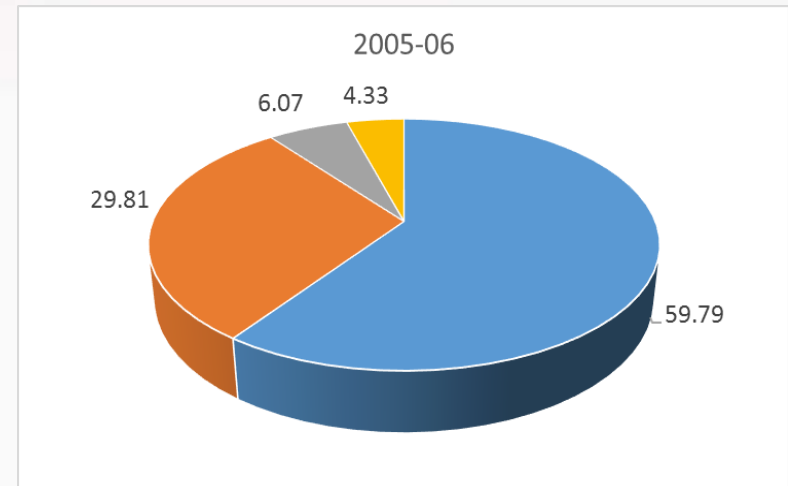
# How Food is acquired? (% share in dietary energy)



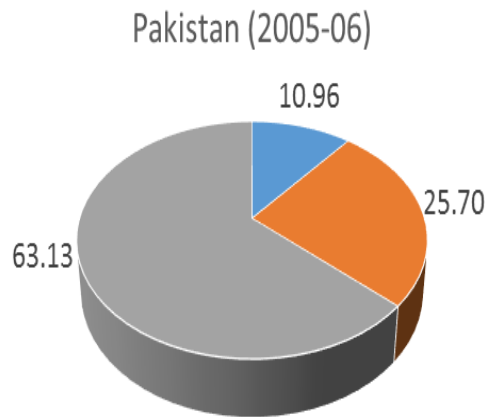
## Urban



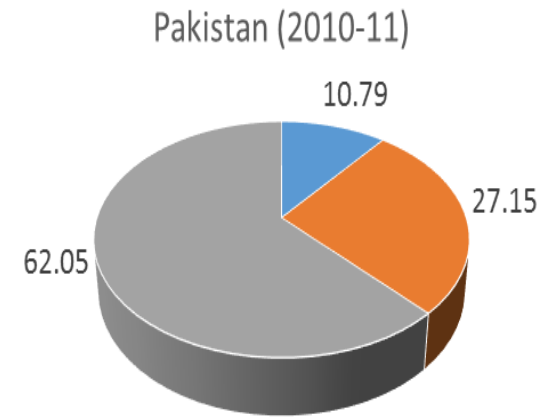
## Rural



# Composition of Diet in terms of micronutrients



- Share of DEC from protein (%)
- Share of DEC from fat (%)
- Share of DEC from total carbohydrates and alcohol (%)

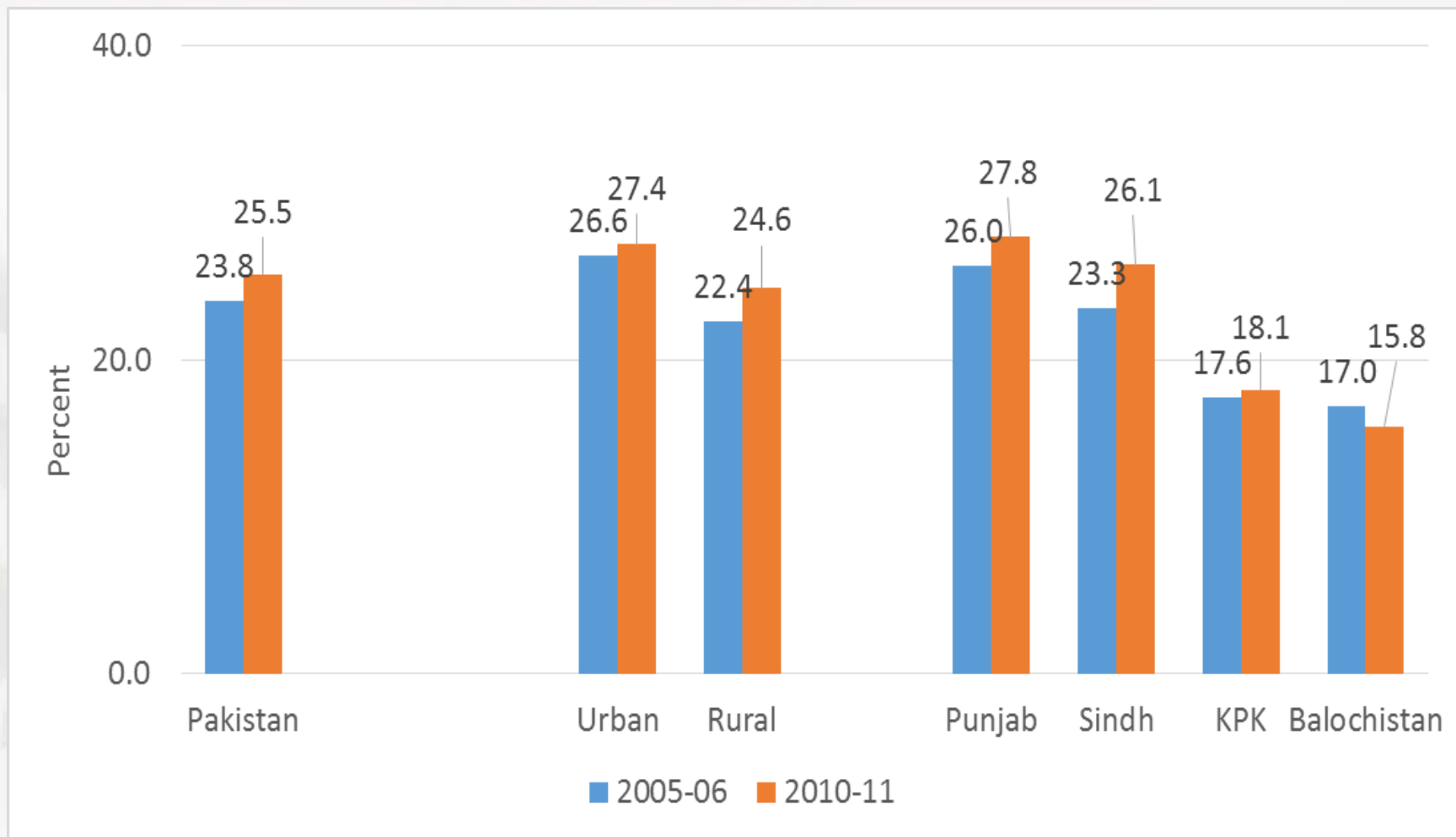


- Share of DEC from protein (%)
- Share of DEC from fat (%)
- Share of DEC from total carbohydrates and alcohol (%)

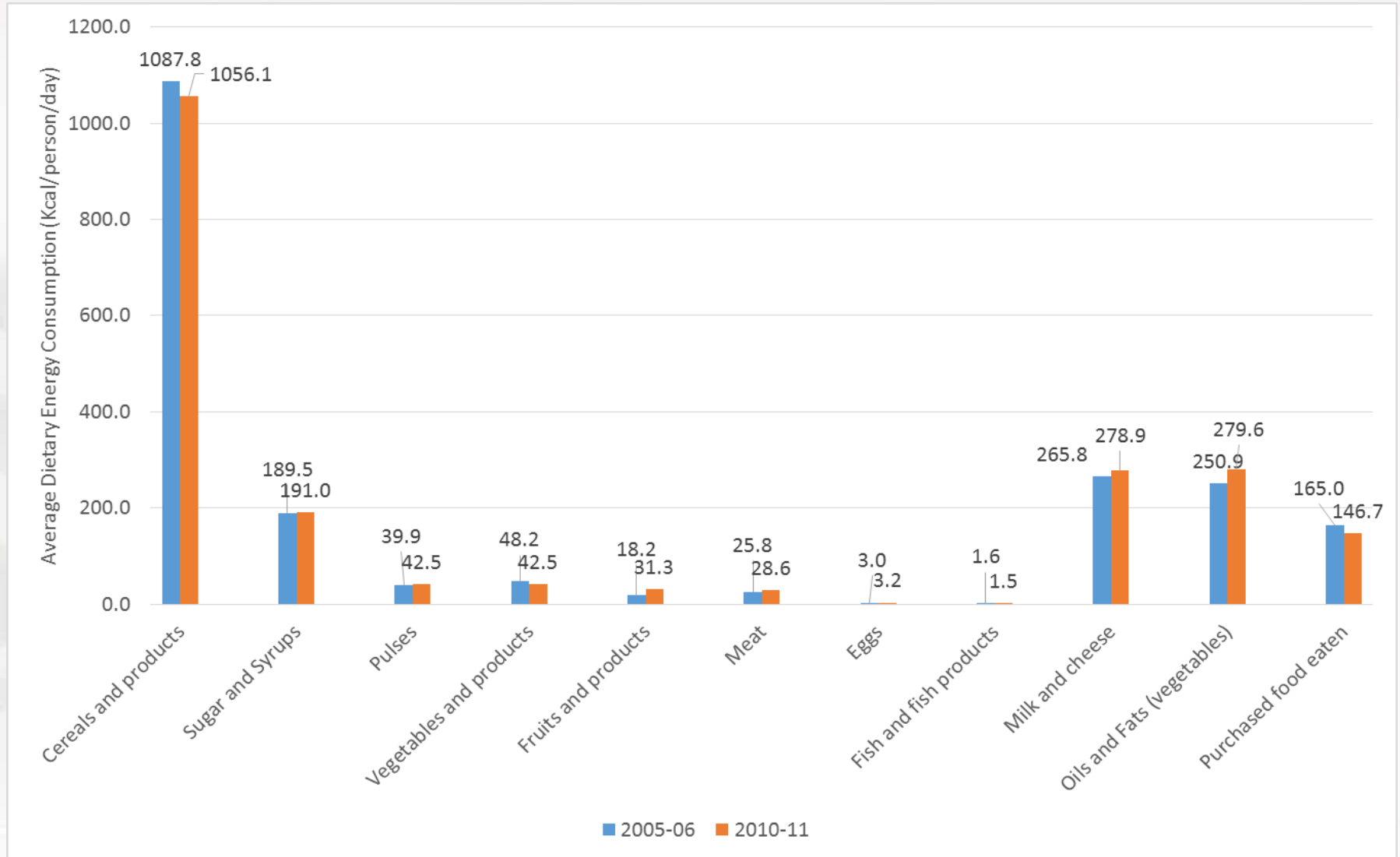
WHO/FAO recommendation for a Balanced Diet in terms of macronutrients:

- Protein 10 to 15%
- Fats 15 to 30%
- Carbohydrates 55 to 75%

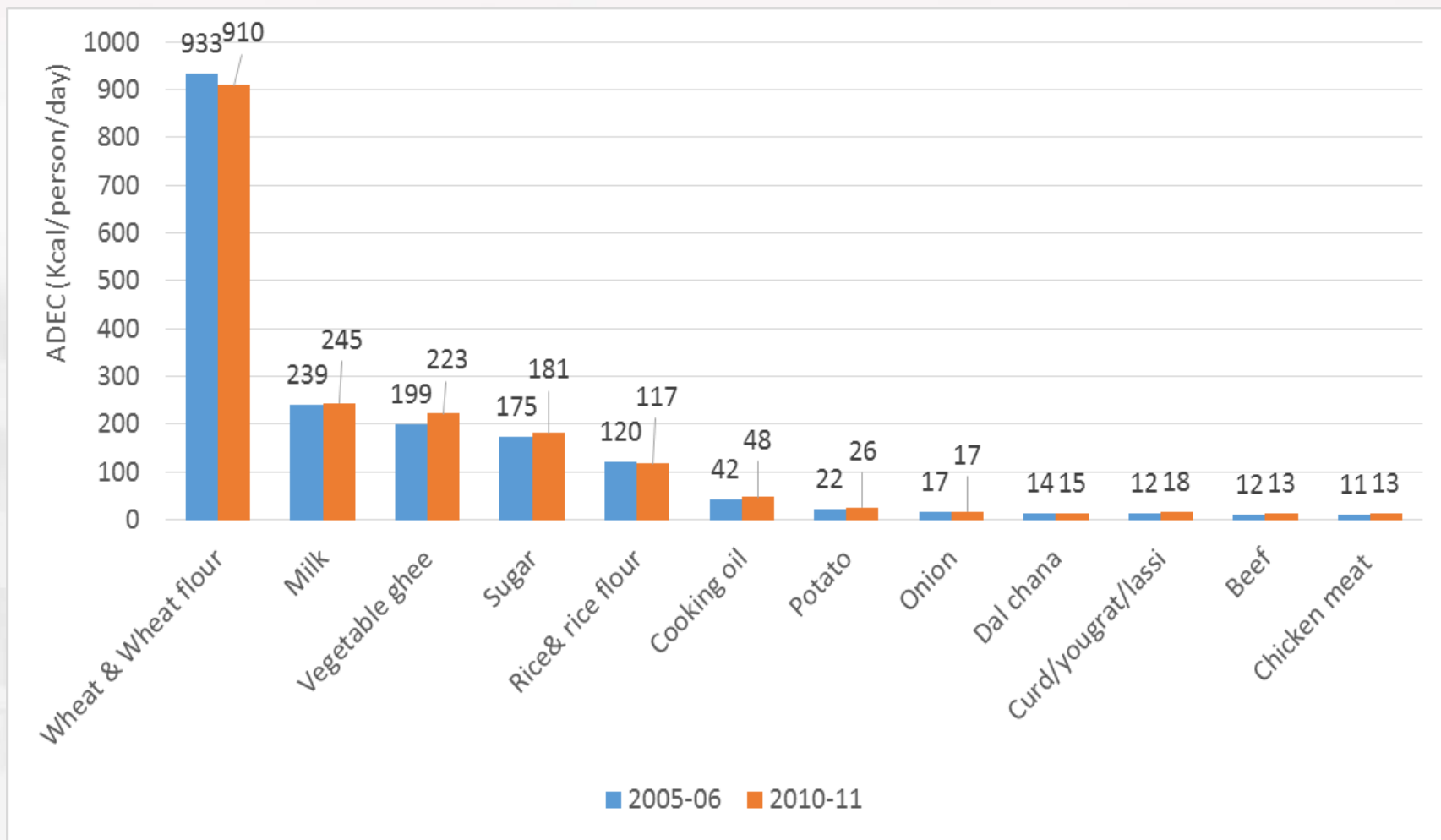
# Share of animal protein in total Protein Consumption



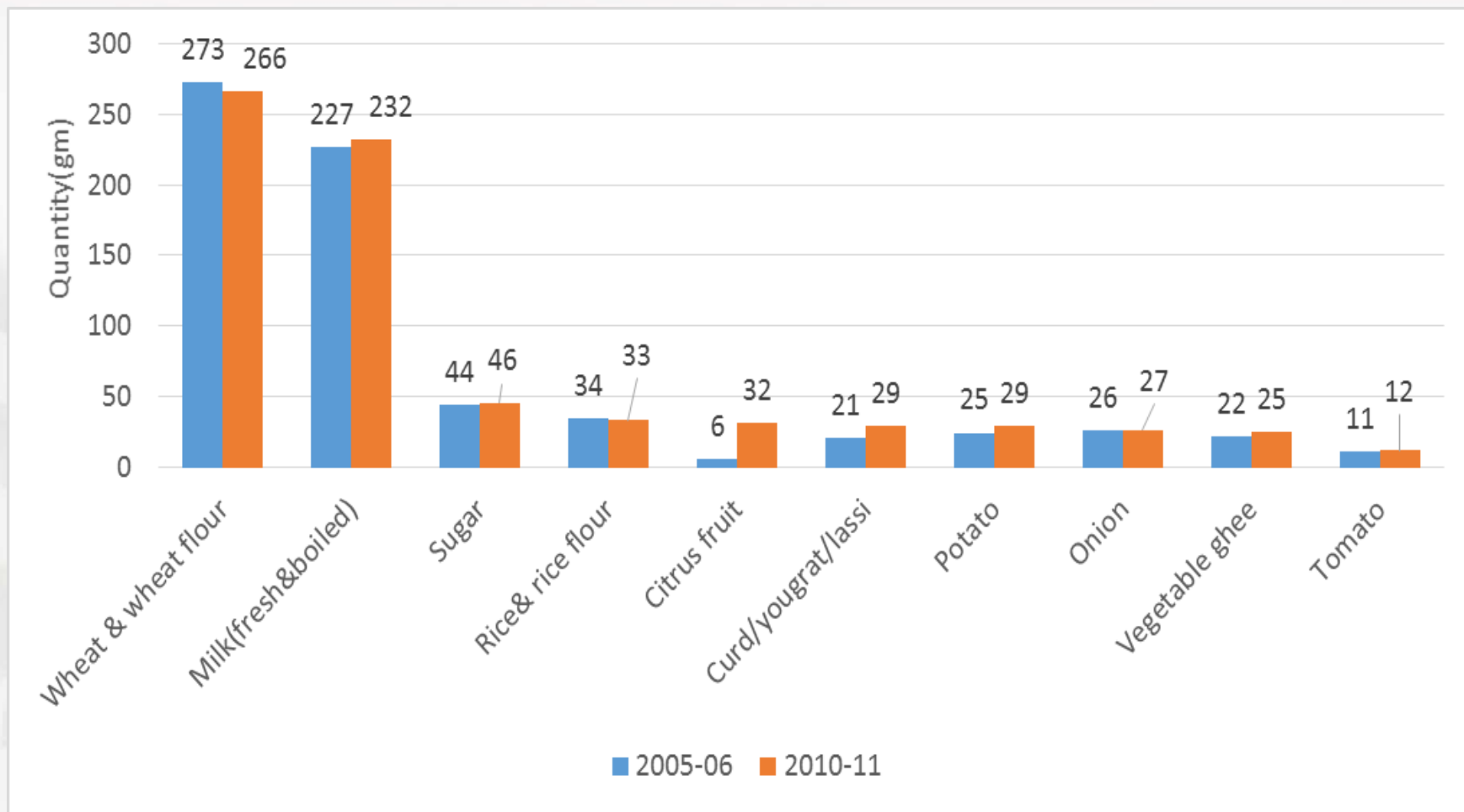
# Contribution of Major Food Commodity Groups to Pakistan Diet (Kcal/person/day)



# Contribution of Major Food Items to Pakistan Diet (Kcal/person/day)

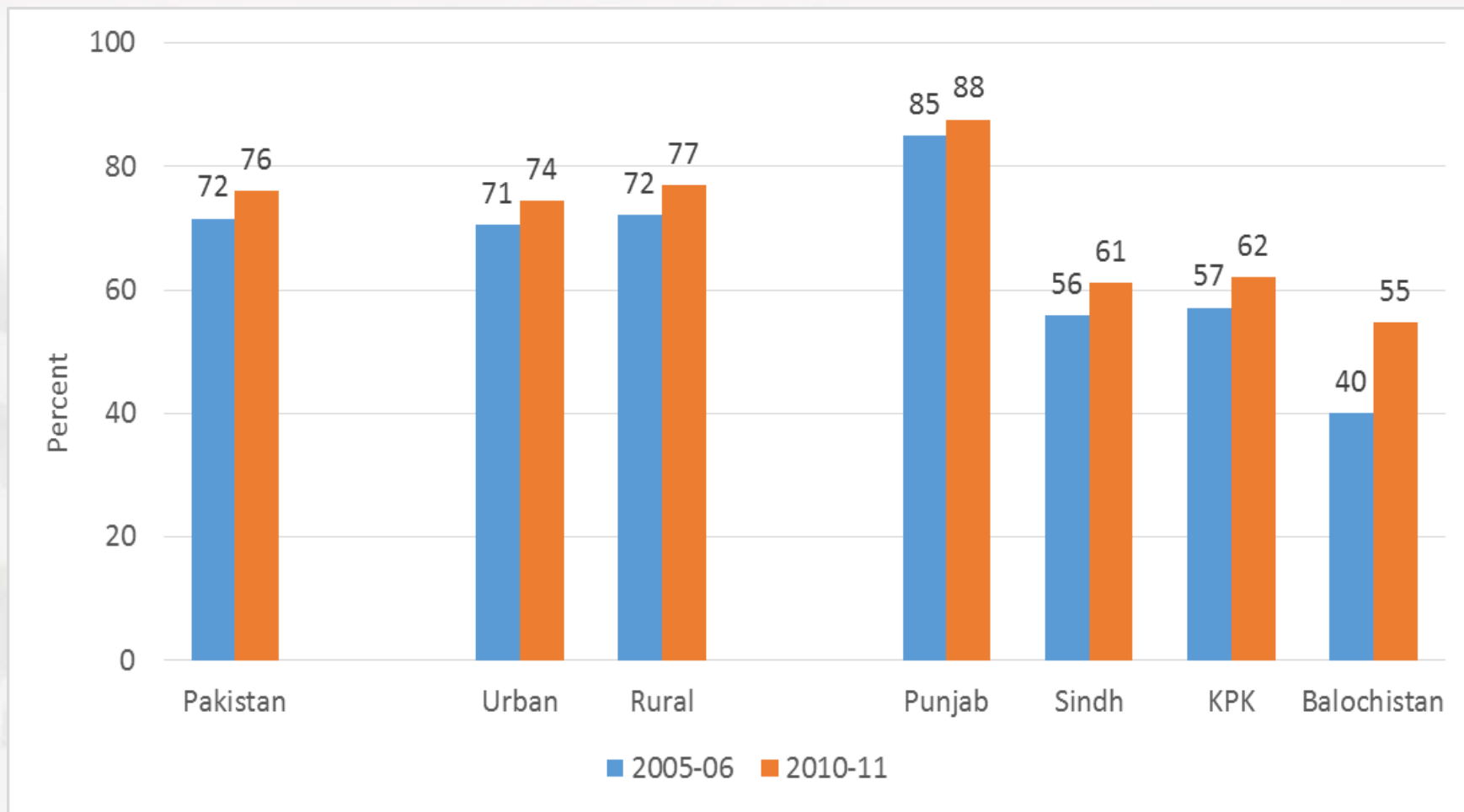


# Contribution of Major Food Items to Pakistan Diet (gm/person/day)

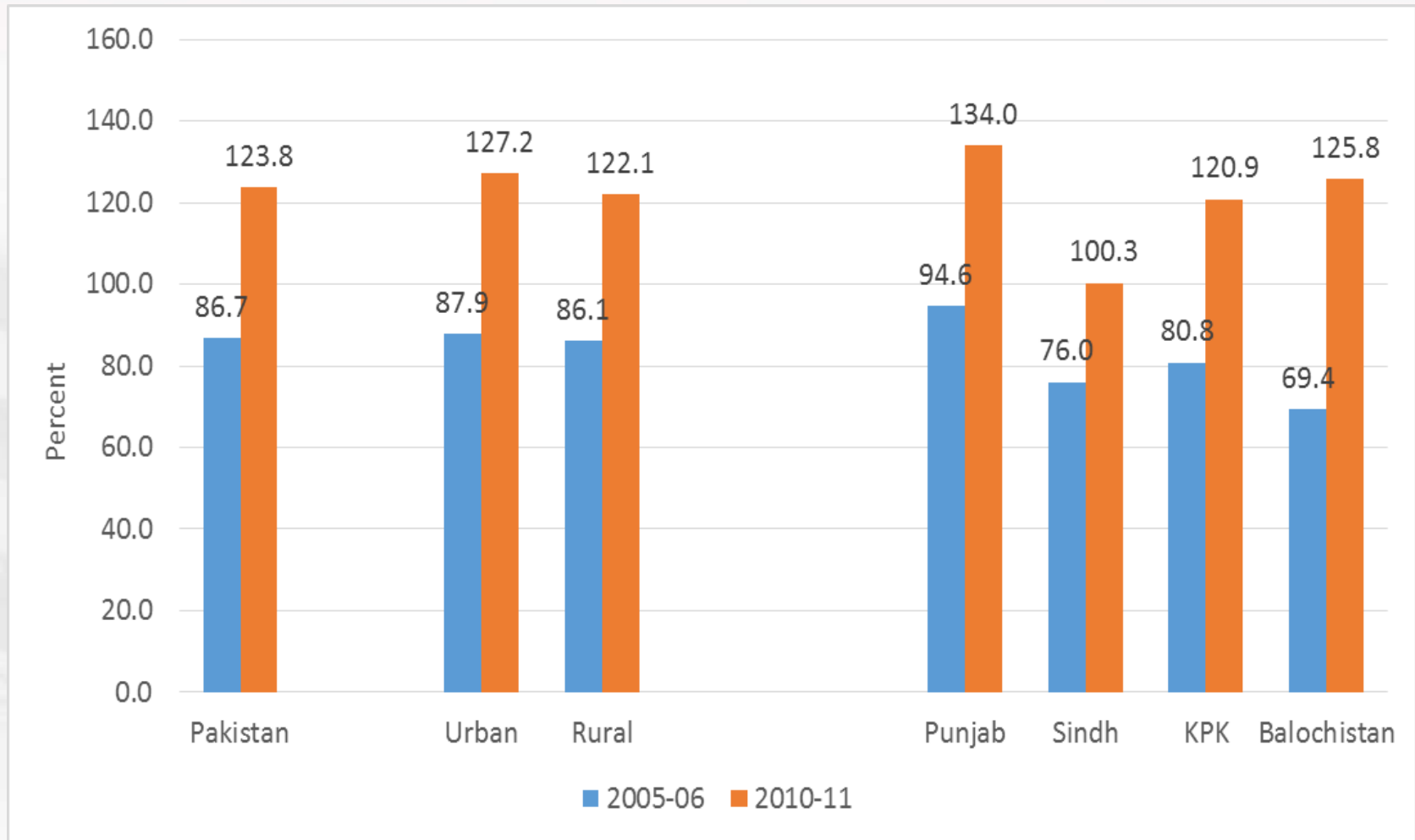




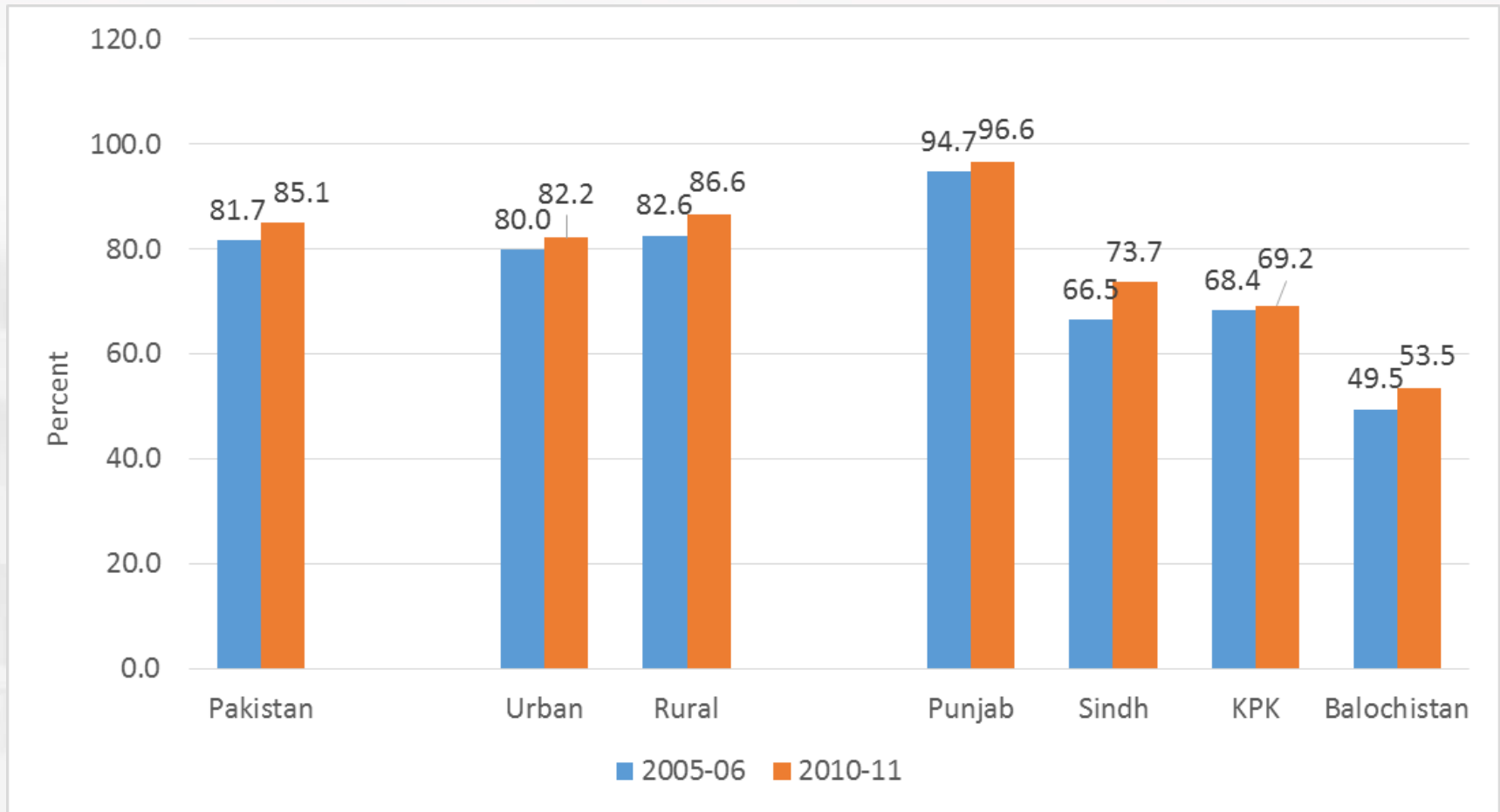
# Ratio of Vitamin A availability to WHO Requirement (%)



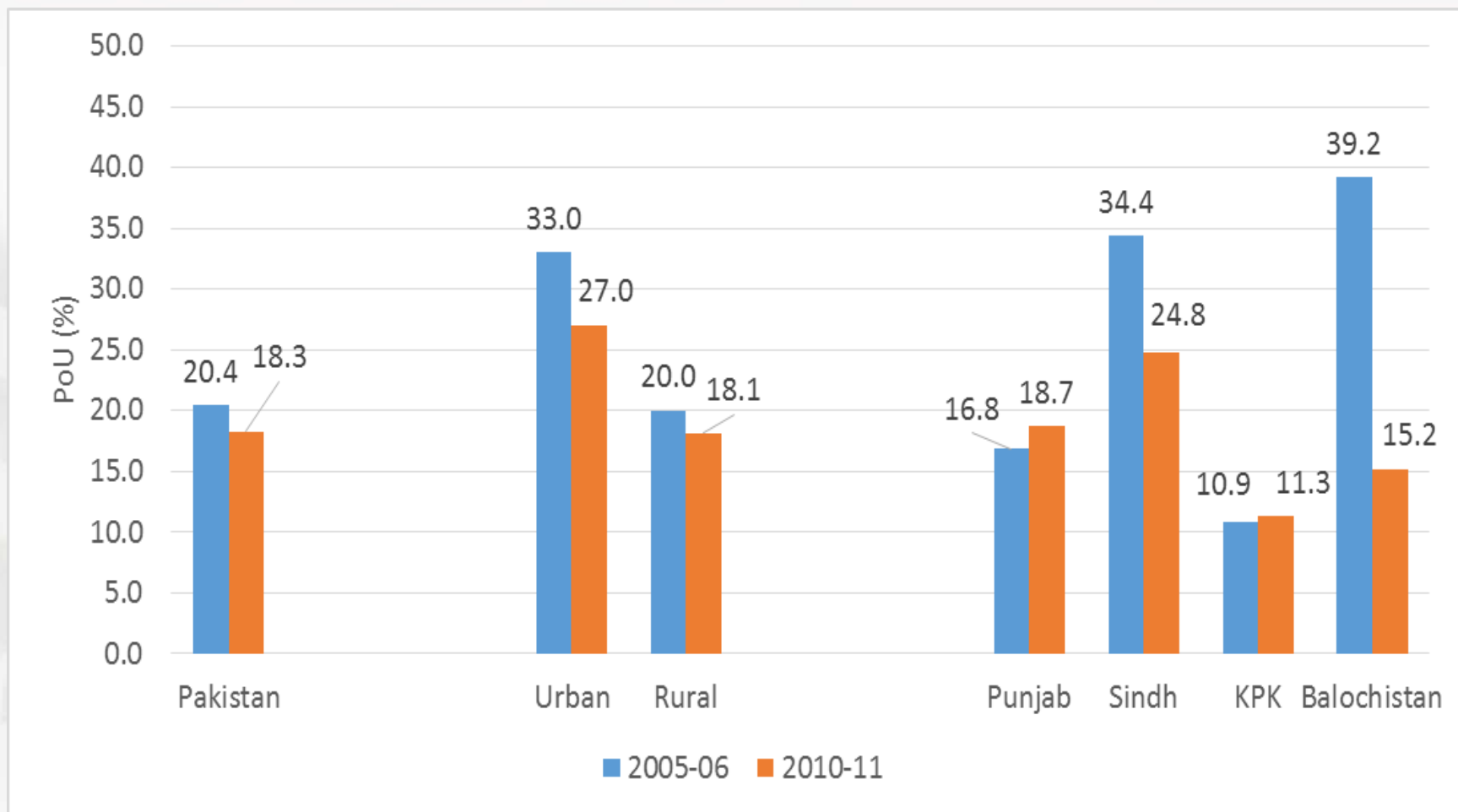
# Ratio of Vitamin C available to WHO Recommended amount (%)



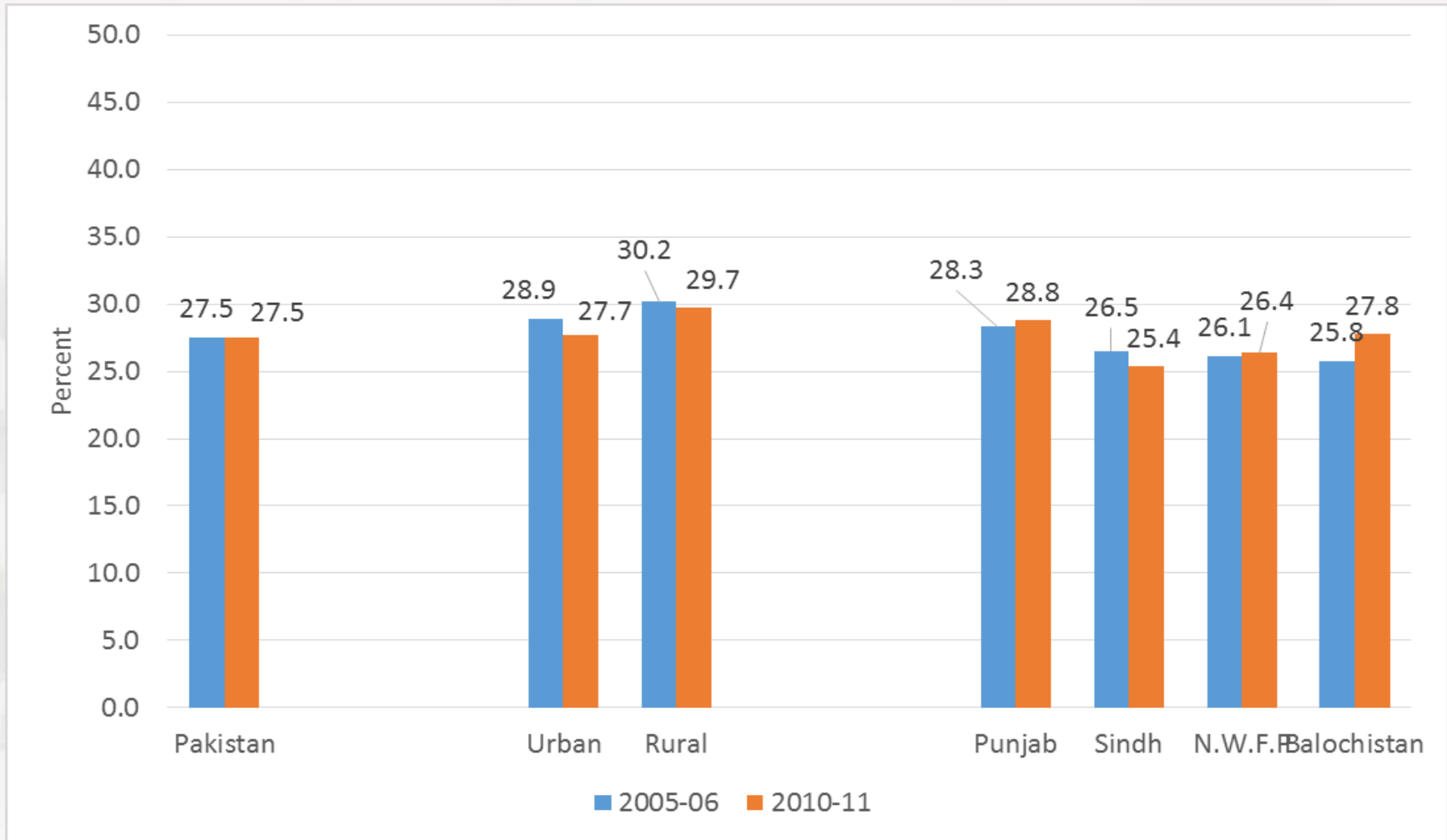
# Ratio of Calcium available to WHO Recommended amount (%)



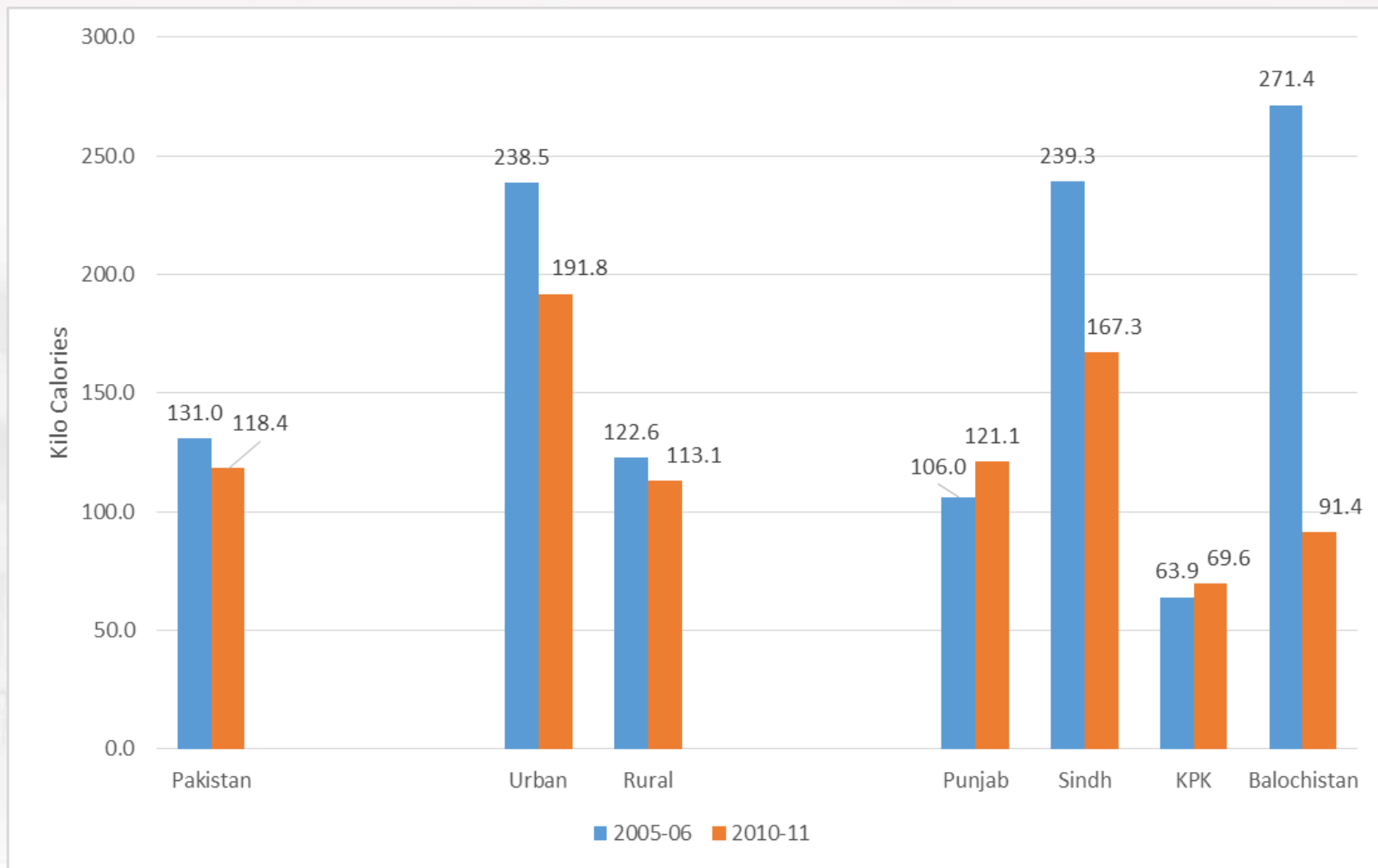
# Trends in Prevalence of Undernourishment (%)



# Trends in CV of DEC (%)



# Trends in Depth of Food Deficit (Kcal/person/day)



# Conclusions/Recommendations



- FAO should use the updated inputs derived from the analysis particularly the CV parameter, which has decreased from 30.7% to 27.5%.
- Food data collected is a Pakistan HIES data and is suitable to derive National & Sub-National Food Security & Nutrition Indicators.
- In Pakistan HIES Questionnaire, food items should be increased in number as well as they may be well-defined & specified.
- Pakistan should update the Food Composition Table with the support of Nutrition Department of Research, like Bangladesh.

STATISTICS HOUSE

**THANK YOU**

