



NATIONAL UNIVERSITY OF MODERN LANGUAGES

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To: Ministry of Planning Development & Special Initiatives/ Ministry of National Food Security & Research, Islamabad

Subject: **Research Findings**

1. National University of Modern Languages (NUML) is a premier University in conducting high quality teaching and research activities. We are currently working on various research projects which can improve public functioning/administration or in devising policies for the public interest in various domains. In this regard our faculty/students have carried out a research study titled "**Exploring the Relationship between Road Infrastructure and Agricultural Productivity: Evaluating Empirical Evidence of Pakistan Economy**". The **outcomes of the study** are enclosed herewith for ready reference/perusal, please.
2. Forwarded for information, please.

Handwritten signature and date: 18/5/23
Dr. Malik Saqib Ali
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Dr. Shafqut Ullah
Research Supervisor

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Pakistan has adopted a road-led growth strategy since the 1980s to onward. It is also called the Haq/Hag economic growth approach. Present study tries to evaluate this growth strategy in a special focus of agriculture sector.

At first stage, study finds the impact of road infrastructure (paved roads) on agricultural output by using time series data. At second stage, agricultural productivity of road infrastructure is calculated at aggregate and disaggregate level.

The impact of road infrastructure on total agriculture output is positive but statistically insignificant in the long and short run. Whereas farm technology and research & development has a significant impact on agriculture output. At disaggregate level, the impact of road infrastructure has significant impact on wheat (food crop) production. In third model, impact of road infrastructure on rice output, it finds insignificant impact in the long run. Interestingly, the road infrastructure has a positive and significant impact on production of cotton crop in the long run. Although in the short run, the effect of road infrastructure on cotton is statistically insignificant.

The growth strategy of the 1980s proved counterproductive for agriculture sector. Although in the early days, the productivity of agriculture sector improved due to increase in road infrastructure. But after the 2000s, the contributions from road infrastructure in terms of productivity are very minimal. The productivity of road approaches its saturation point. Concern authorities should focus on R&D and farm technology instead of road infrastructure only.