

Research Article



# Allocative Efficiency of Maize Growers in Khyber Pakhtunkhwa, Pakistan

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**Supplementary Table 1:** Estimates of Cobb–Douglas type production function for Upper Dir.

| Variables | Coefficients | Std. Dev. | t-ratio            | p-value |
|-----------|--------------|-----------|--------------------|---------|
| Constant  | 5.389204     | 0.1168851 | 46.11**            | 0.000   |
| LnTractor | 0.0960052    | 0.0633864 | 1.51 <sup>ns</sup> | 0.137   |
| LnUrea    | 0.037908     | 0.0234296 | 1.62 <sup>ns</sup> | 0.113   |
| LnDAP     | 0.0221431    | 0.0246093 | 0.90 <sup>ns</sup> | 0.373   |
| LnFYM     | 0.0327469    | 0.0076422 | 4.28**             | 0.000   |
| LnLabour  | 0.309925     | 0.0537962 | 5.76**             | 0.000   |
| F (5, 44) | 15.53        |           |                    |         |
| R-squared | 0.7111       |           |                    |         |

**Source:** Authors' estimates from data, 2017; **Note:** \*\* and \* depicts significance at 1% and 5% levels, respectively.

**Supplementary Table 2:** Estimates of Cobb–Douglas type production function for Abbottabad.

| Variables | Coefficients | Std. Dev. | t-ratio             | p-value |
|-----------|--------------|-----------|---------------------|---------|
| Constant  | 6.275155     | 0.2093261 | 29.98**             | 0.000   |
| LnTractor | -0.0017052   | 0.078611  | -0.02 <sup>ns</sup> | 0.983   |
| LnUrea    | 0.1269092    | 0.0293125 | 4.33**              | 0.000   |
| LnDAP     | 0.0228787    | 0.0251671 | 0.91 <sup>ns</sup>  | 0.368   |
| LnFYM     | -0.0057296   | 0.0105276 | -0.54 <sup>ns</sup> | 0.589   |
| LnLabour  | -0.0274682   | 0.1020085 | -0.27 <sup>ns</sup> | 0.789   |
| F (5, 44) | 10.14        |           |                     |         |
| R-squared | 0.3883       |           |                     |         |

**Source:** Authors' estimates from data, 2017; **Note:** \*\* and \* depicts significance at 1% and 5% levels, respectively.

**Supplementary Table 3:** *Estimates of Cobb–Douglas type production function for Peshawar.*

| Variables | Coefficients | Std. Dev. | t-ratio            | p-value |
|-----------|--------------|-----------|--------------------|---------|
| Constant  | 6.03009      | 0.13689   | 44.05**            | 0.000   |
| LnTractor | 0.11519      | 0.09707   | 1.19 <sup>ns</sup> | 0.242   |
| LnUrea    | 0.03487      | 0.02457   | 1.42 <sup>ns</sup> | 0.163   |
| LnDAP     | 0.02470      | 0.02154   | 1.15 <sup>ns</sup> | 0.258   |
| LnFYM     | 0.02950      | 0.01023   | 2.88**             | 0.006   |
| LnLabour  | 0.1200       | 0.0620    | 1.91**             | 0.062   |
| F (5, 44) | 7.10         |           |                    |         |
| R-squared | 0.25097      |           |                    |         |

**Source:** Authors' estimates from data, 2017; **Note:** \*\* and \* depicts significance at 1% and 5% levels, respectively.

**Supplementary Table 4:** *Estimates of Cobb–Douglas type production function for Lakki Marwat.*

| Variables | Coefficients | Std. Dev. | t-ratio            | p-value |
|-----------|--------------|-----------|--------------------|---------|
| Constant  | 5.555397     | 0.3405561 | 16.31**            | 0.000   |
| LnTractor | 0.2706889    | 0.0750448 | 3.61**             | 0.001   |
| LnUrea    | 0.0167593    | 0.0336488 | 0.50 <sup>ns</sup> | 0.621   |
| LnDAP     | 0.0594334    | 0.0170395 | 3.49**             | 0.001   |
| LnFYM     | 0.031819     | 0.0103304 | 3.08**             | 0.004   |
| LnLabour  | 0.1754009    | 0.1174649 | 1.49 <sup>ns</sup> | 0.143   |
| F (5, 44) | 6.62         |           |                    |         |
| R-squared | 0.4883       |           |                    |         |

**Source:** Authors' estimates from data, 2017; **Note:** \*\* and \* depicts significance at 1% and 5% levels, respectively.