

Definition:

Financial benefits
Human labour

Description

Benefit: This impact area assesses benefits via their appreciation by markets (Di Maio et al., 2017). It is sensitive to various socio-economic factors because commodity prices reflect demand and are also influenced by value systems and policies through effects of financial incentives and tax regulations.

Resource: The use of labour is closely connected with the provision of employment and therefore a reduction is not always positive. If the main benefit of a reduction in the use of labour is reducing factor costs, it is recommended to use monetary indicators instead. However, where reductions serve the purpose of reducing hard physical labour and thereby increasing human health, labour should be used as indicator.

Correlation with soil management

[149] Labor productivity of larger farms is higher than of small farms

[288] Formation of a mixed economy in the agrarian sector

Strength & weaknesses pertaining to measurement of this impact area

Financial Benefits: Financial indicators are well suited for integrating or comparing agricultural production processes with products for very different end uses. For calculating benefit-cost ratios (BCR), indicators that reflect revenue should be used. In most other cases, indicators that reflect net benefits (after deduction of charges, costs and expenses) provide a more realistic picture of benefits generated. Price volatilities make efficiency calculations valid only for a certain point in time and space.

Sample Indicators










Indicator values from		Survey	
Experiment or direct measurement		Statistical- or census data	
Expert assessment		Literature values	
Model		Maps or GIS	
Stakeholder participation		Not provided	



Table 1: No Scale



Indicator	Unit	Indicator values from
[288] Specific labor productivity (Gross output/Man-hour)	\$ * h ⁻¹	
[288] Specific labor productivity (Gross output/Employee)	\$ * No ⁻¹	

Table 2: Farm Scale








Indicator	Unit	Indicator values from
[149] Labor productivity (Total income generated from farming during a year/Total work days during a year)	\$ * day ⁻¹	
[149] Labor productivity (Total income generated from farming during a year/Farm labor)	\$ * No ⁻¹	
[176] Net agricultural income (Prices of inputs or sold products)/Family worker	\$ * No ⁻¹	 , 

Table 3: Regional Scale

Indicator	Unit	Indicator values from
[1] Value of yields (including subsidies)/Number of employees	\$ * No ⁻¹	
[1] Added value/Number of employees	\$ * No ⁻¹	
[142] Labor efficiency (Economic output of crop yield/Farming activities of labor)	\$ * labor time ⁻¹	



References

ID	Citation	¹ Soil type/ texture
1	Adamisin, P., et al. (2015). "Natural climatic conditions as a determinant of productivity and economic efficiency of agricultural entities." <i>Agricultural Economics-Zemedelska Ekonomika</i> 61(6): 265-274.	n/a
142*	Latinopoulos, D. (2009). "Multicriteria decision-making for efficient water and land resources allocation in irrigated agriculture." <i>Environment, Development and Sustainability</i> 11(2): 329-343.	n/a
149*	Li, G., et al. (2013). "Re-examining the inverse relationship between farm size and efficiency: The empirical evidence in China." <i>China Agricultural Economic Review</i> 5(4): 473-488.	n/a
176	Moreau, P., et al. (2012). "Reconciling technical, economic and environmental efficiency of farming systems in vulnerable areas." <i>Agriculture Ecosystems & Environment</i> 147: 89-99.	Deep loamy and shallow brown soils
288	Zotov, V. P., et al. (2014). "The main labor-forming factors and the assessment of labor efficiency in agriculture (by the example of kemerovo oblast)." <i>Foods and Raw Materials</i> 2(1): 91-97.	n/a

¹**Soil type/ texture:** If provided, what are type and texture of the soils studied in the paper?

*The impact area discussed on this factsheet is not a focus of the cited paper