



Fair Pricing of farm produces in Bangladesh

Nazrul Islam

N.M. Ashikuzzaman is gratefully acknowledged for his assistance

Brown Bag Seminar Series: February 25, 2021

Department of Economics, NSU



Aim and Outline



Aim:

 Discussion on how to develop a practical system for calculating a 'fair price' to be paid to farm producers.

Outline:

- Background Motivation
- Literature on Fair pricing
- Living-Income approach Model





• Almost everyday we get media news related to 'fair price' of farm produce such as:

Fair price eludes boro farmers, Daily Star, July 7, 2020

No fair price for farmers, no growth, Prothom Alo English, 30 May 2015 <u>https://en.prothomalo.com/bangladesh/No-fair-price-for-farmers-no-growth</u>

Fair prices elude farmers, Daily Star, December 30, 2019 https://www.thedailystar.net/business/news/fair-prices-elude-farmers-1847005



Background Motivation



Fair price eludes boro farmers Daily Star, July 7, 2020 Year after year, Boro farmers have reported having to sell their paddy far lower than the government-fixed prices.

- >> Half the farmers got between Tk **701** and Tk **900** for a maund of paddy.
- **13**% were forced to sell maund of paddy below Tk **600**.
- > Production costs increased by **13**% this year.
- **43**% of the farmed land not owned by the farmers.





No fair price for farmers, no growth Prothom Alo English, 30 May 2015, 02:59 https://en.prothomalo.com/bangladesh/No-fair-price-for-farmers-no-growth

Farmers have to spend Tk 650 to Tk 700 per maund in boro rice production, and have to sell at Tk 420 to Tk 450 in the market, incurring loss of Tk 250. Economists think that the economy as a whole faces long-term threat if the farmers are deprived of a fair price.



https://en.prothomalo.com/bangladesh/No-fair-price-for-farmers-no-growth



Background Motivation



Paddy farmers didn't get fair price, agriculture minister admits

bdnews24.com 13 Sep 2019



"The farmers have suffered immense losses as they did not get **fair price** for their paddy. They are quite agitated," The Agriculture Minister told parliament.

https://bdnews24.com/economy/2019/09/13/paddy-farmers-didnt-get-fairprice-agriculture-minister-admits





Fair prices elude farmers Daily Star, December 30, 2019

https://www.thedailystar.net/business/news/fair-prices-elude-farmers-1847005







<u>চালের দাম কেন বাড়ছে? । সমাজ সংস্কৃতি । DW | 23.08.2020</u>



বাংলাদেশ

চালের দাম বাড়লো কেন? অন্তত দু'জন মন্ত্রী চালের দাম বাড়ার জন্য সাংবাদিকদের দায়ী করেছেন। তাঁদের কথা, সাংবাদিকরা গুজব ছড়ানোর কারণেই দাম বেড়েছে। আসলে চালের কোনো ঘাটতি নেই। তারপরও দাম বাড়ার জন্য তাঁরা মিল মালিকদেরও দায়ী করেছেন।





হঠাৎ চালের মূল্য বাড়লো কেন? শফিকুল ইসলাম ১৮ জানুয়ারি ২০২০, ২৩:০৬ https://www.banglatribune.com/604652

হঠাৎ করেই আবার বেড়েছে চালের মূল্য। গত সপ্তাহে যে মোটা চালের কেজি ৩৫ টাকা ছিল, সেই চালই এখন বিক্রি হচ্ছে ৪০ টাকায়। তবে, এই সময়ে চালের মূল্য বেড়ে যাওয়ার কোনও কারণ নেই বলে দাবি করছেন আড়তদাররা। খুচরা ব্যবসায়ীরা বলছেন, চালের সরবরাহ কম থাকায় মূল্য বেশি। এদিকে, ক্রেতারা বলছেন, সরকারের নজরদারির অভাবেই ব্যবসায়ীরা যখন–তখন চালের মূল্য বাড়াচ্ছেন। আর এই মূল্যবৃদ্ধিকে কৃষকের জন্য ভালো সংবাদ হিসেবেই দেখছেন কৃষিমন্ত্রী ড. আব্দুর রাজ্ঞাক। তার মতে, মূল্যবৃদ্ধিতে কৃষকরা লাভবান হচ্ছেন। শুক্রবার (১৭ জানুয়ারি) ও শনিবার রাজধানীর বিভিন্ন চালের বাজার ঘুরে এমন তথ্য জানা গেছে।





Govt trying to ensure fair price of jute: Minister

Textiles and Jute Minister Golam Dastagir Gazi on Monday said the government is working to ensure that the farmers get the **fair price** for their produced jute.

•AUGUST 03, 2020, 06:27 PM • UNB NEWS

https://www.unb.com.bd/category/bangladesh/govt-trying-to-ensure-fairprice-of-jute-minister/55505





Better value chain needed to ensure fair prices of farm products: experts Staff Correspondent | Published: 23:54, Nov 08,2020

https://www.newagebd.net/article/121103/better-value-chain-needed-to-ensurefair-prices-of-farm-products-experts

Farmers' Right to Fair Price

Necessitates Co-operative Farming 10 September, 2019 12:00 AM <u>https://www.daily-</u> <u>sun.com/printversion/details/422348/Farmers%E2%80%99-Right-to-</u> <u>Fair-Price</u>

PM reiterates fair price of crops

Published at 12:29 am January 23rd, 2020 https://www.dhakatribune.com/bangladesh/parliament/2020/01/23/pmreiterates-fair-price-of-crops





Bangladesh launches **fair price** onion outlets to stabilize market

Under the Open Market Sales program, in a **fair price** outlet in Dhaka, the onion price has been fixed at 46 taka per kg, much lower than that in outside markets. The OMS price of onion is lower by at least 100 taka a kg from the current retail market price.



Background Motivation





৬. মোহাম্মদ জাহাঙ্গীর আলম, ড. মো. ইসমাইল হোসেন, ড. নাজিয়া তাবাসসুম, ড. মো. সালাউদ্দিন পলাশ, ড. সারাহ ইয়াসমিন, দিলশাদ জাহান ও হুরুন্নাহার খুশি
১২ অক্টোবর ২০২০, ০০:০০:০০ | প্রিন্ট সংস্করণ



কৃষিনীতি ২০১৮-এর ১৬.৪ উপ-অনুচ্ছেদ অনুযায়ী কৃষিপণ্যের ন্যায্যমুল্র নিশ্চিতকরণে সমবায়ভিত্তিক বিপণনের' সহযোগিতা ও উৎসাহ প্রদানের কথা বলা হয়েছে। অনেক গবেষণায় দেখা গেছে, চুক্তি ও সমবায় বিপণন কৃষিপণ্যের দাম স্থিতিশীল করার মাধ্যমে কৃষককে উৎপাদনে আগ্রহী করে তোলে।

ভারতসহ পৃথিবীর উন্নত ও উন্নয়নশীল দেশগুলোয় কৃষিবান্ধক কৃষিমূল্য কমিশন রয়েছে। দেশভিত্তিক প্রাতিষ্ঠানিক নামের ভিন্নতা থাকলেও এ উদ্যোগের উদ্দেশ্য হল-কৃষকের আয় স্থিতিশীল রাখা, কৃষিপণ্যের মূল্য ওঠানামা সহনশীল সীমায় রাখা, দেশি ও আন্তর্জাতিক বাজার তথ্যের (চাহিদা, সরবরাহ, দাম ইত্যাদি) বিশ্লেষণ এবং অভ্যন্তরীণ উৎপাদন ও দামের আগাম সংকেত প্রদান করা ইত্যাদি।

Mustafa K. Mujeri **Fair prices for rice farmers: Simple idea but complex reality** Monday, 3 June 2019, <u>https://www.thefinancialexpress.com.bd/views/fair-prices-for-rice-farmers-simple-idea-but-complex-reality-1559575964</u>





2. What is "Fair Price"?

- What is market price and what is fair price?
- From the view of market prices to the fair prices and what constitutes the difference between them?
- Do we see any gap between market prices and fair prices? If so then what market situation can better characterize the positive gap or the negative gap? Even, when and under what circumferences, they become totally consistent or partially inconsistent?

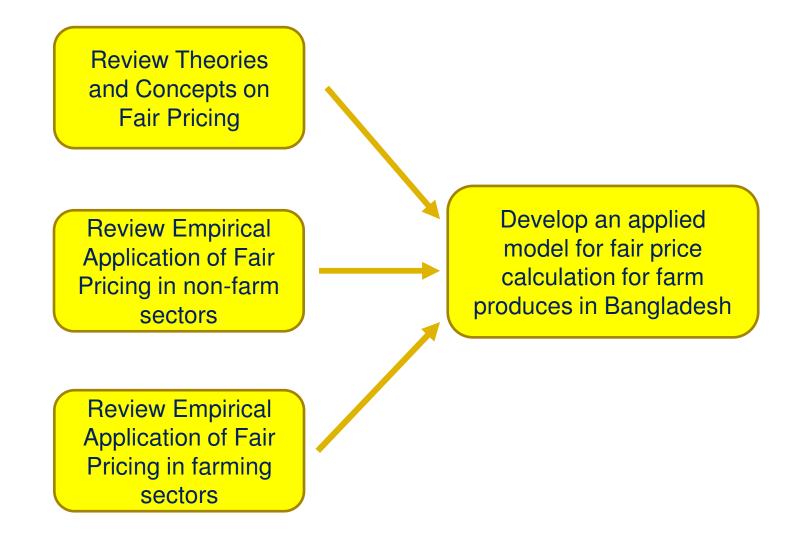
3. How to determine and calculate a Fair Price and for whom?

- How are the fair prices determined in addition to the settlement of trade at market clearing prices?
- In addition to the market forces, what other factors are there to take into account while it requires to fix the fair prices?
- What are the implication of fair prices to the behavior of economic agents in any trading situation?



Research Approach









Perspectives of Fair Price Classification: both in theory and application

- Economics
- Politics and ethics
- Psychology
- Sociology
- Anthropology





Fair pricing or pricing for profit?

Cite as: CMAJ 2017 May 23;189:E733-4. doi: 10.1503/cmaj.1095429

What is fair pricing?

It's a question making headlines and prompting debate, such as at a panel discussion at the recent 2017 Canadian Agency for Drugs and Technologies in Health Symposium. What was billed as a two-person panel on fair drug pricing swelled to six. Every chair was filled and people lined the walls. At stake are big dollars and sustainability.





Blount, Sally (2000).

Whoever Said that Markets Were Fair? Negotiation Journal, pp.237-252, July 2000

The popular notion that markets are "fair" is wrong. Working from theory and behavioral research, the author examines the foundations of markets and their relationship to negotiations. In the process, she demonstrates that there is nothing inherently fair about supply and demand curves or market clearing prices. Although market price information may provide a reasonable standard for resolving a price negotiation, it too has little to do with intrinsic fairness. Markets are efficient and incredibly powerful at organizing people and allocating resources, but the idea that they have anything to do with fairness (or unfairness) is a socially-constructed illusion.





Rotemberg, J. J. (2011). **Fair pricing.** *Journal of the European Economic Association*, *9*(5), 952-981.

The resulting model rationalizes several observed pricing practices and seeks to explain what leads people to regard certain prices as *fair*.





Arsyad, M. (2019). Prices of agricultural products and poverty: how strongly are the two linked? *Int. J. Agr. Syst.* 7(2): 148-153

Prices of agricultural products and poverty relationship are the two types of standing issue to solve.

This paper argues that price of agricultural products and poverty are strongly related. It employed Correlation and Path analysis procedures and found that: (a) the degree of association between agricultural input, where price is also crucial factor to get input) and poverty is about 70%, indicating that agricultural input is good-fit in explaining poverty; (b) the higher the frequency of getting agricultural extension, and price information for various inputs (and output) in agriculture, the higher the crop productions (agricultural sector, in broad sense) will be gained. This indicates these two variables (inputs-outputs prices) can also be expected to be important instruments in increasing smallholders' income and in turn help them living above poverty line. Farmers household income is strongly affected by prevailing market price. Agricultural price is functioning as intermediate part of income calculation. It is clear that price of agricultural products has a strong linkage with rural poverty alleviation in the country.





Fehr, Ernst and Klaus M. Schmidt (1999). A theory of fairness, competition, and cooperation, *The Quarterly Journal of Economics*, Vol.114 (3):817-868

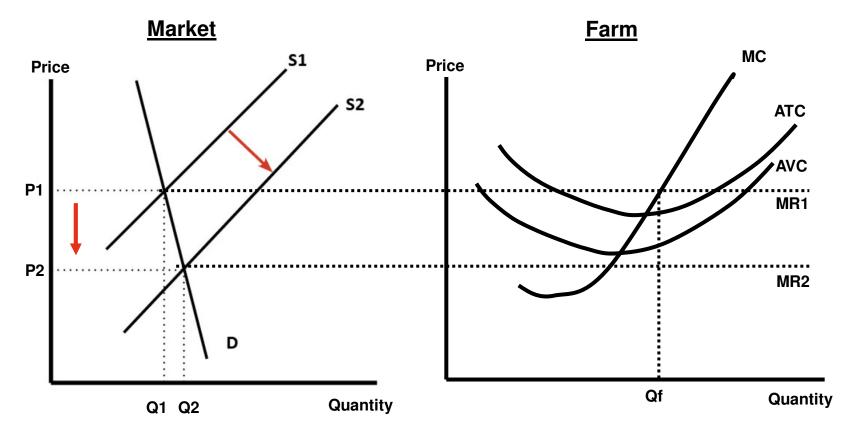
According to Fehr and Schmidt (1999), there is a bewildering variety of evidence. Some pieces of evidence suggest that many people are driven by fairness considerations, other pieces indicate that virtually all people behave as if completely selfish, and still other types of evidence suggest that cooperation motives are crucial



Agriculture – Market Failure



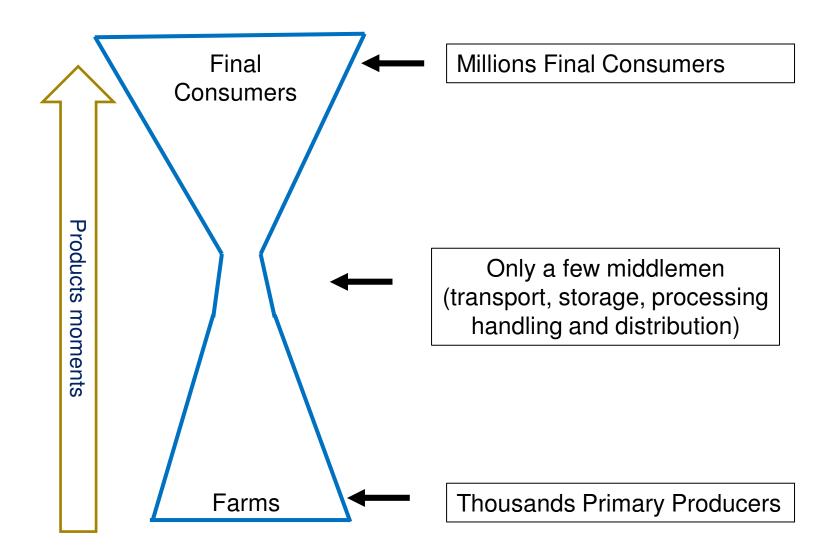
- 1. Volatile Price / volatile supplies
- 2. Low and volatile income for farmers
- 3. Environmental costs of intensive farming (negative externalities)
- 4. Agriculture is key component of rural life (positive externalities)
- 5. Monopsony power of food purchasers.





Typical Supply-Chain Market Structure of Agricultural Produce



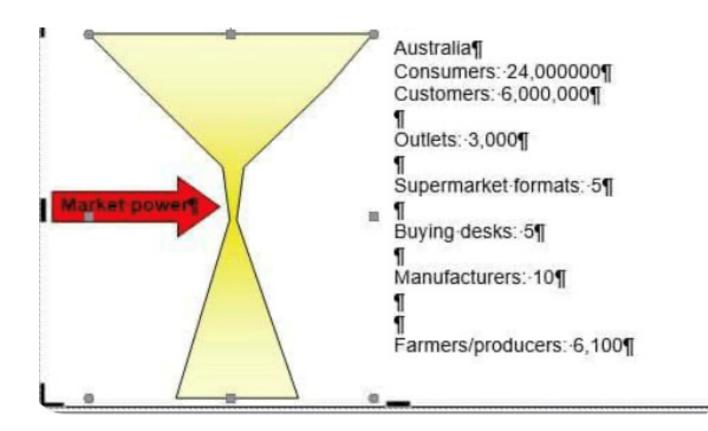




Typical Supply-Chain Market Structure of Agricultural Produce



Australian Dairy Industry example

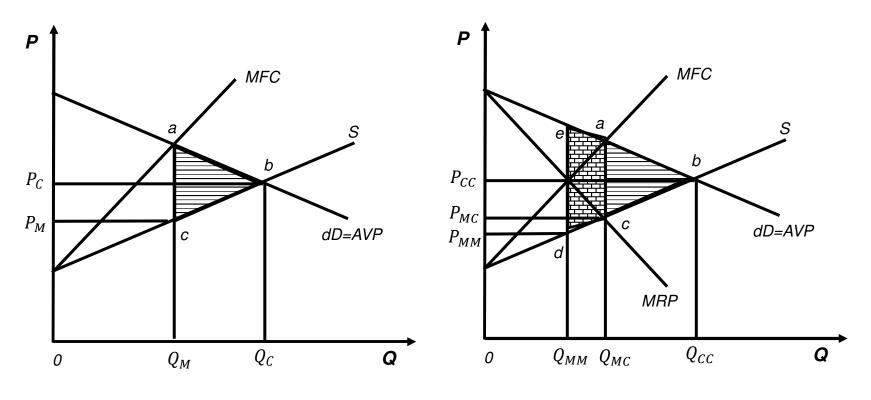




Typical Supply-Chain Market Structure of Agricultural Produce



Agri-food supply chain can be characterised as an industry with imperfect competition,



Welfare Losses (a,b,c area) from Monopsonistic buying power of the Middlemen Additional Welfare Losses (a,c,d,e area) from the *Monopolistic selling power* of the Middlemen



Fair Price calculation for agricultural products



Bronkhorst, R. (2019). Fair Producer Prices (No. 2229-2019-1935).

Bronkhorst, R. (2018). Fair Prices to Achieve a Living Income for Small Farmers and Its Relation to Local Food Purchase Programs. *Sociology and Anthropology*, *6*(11): 833-839.

According Bronkhorst (2018 and 2019), a **Fair Price** to the producer is *the price that enables the producer to earn a Living Income, which means the net income a household would need to earn to enable all members of the household to afford a decent standard of living.*

Fair Prices for small farmers, based on the concept of Living Income which is derived from the Living Wage concept, 'fair' prices can be calculated that the farmer should receive in order to sustain himself and his family. Prices determined by supply and demand are very rarely optimum prices because of market distortions lead to great poverty with the rural population.

The calculation of Fair Prices for agricultural products originating from small-holders starts with the calculation of a Living Wage as it is known in industry (esp. textile), based on the needs of a worker to maintain his/her family.



Fair Price calculation for agricultural products



Our purpose here was to contribute to the discussion on how to develop a practical system for calculating a 'fair price' to be paid to the farm producers and, related to it, the 'fair wages' that should be paid to the wage labourers in Bangladesh.

We propose a system that will calculate as objectively as possible the bottom line for the payment of wage labourers by the farm producers, and following that, the bottom line for the price to be paid by the customer to the farm producer.

The point of departure was to have a methodology that can be easily applied by everyone involved. The purpose was not to provide a detailed theoretical model, but rather a model that can be easily applied in practice.





- Agriculture is used as a typical example of the perfect competition.
- In reality, agriculture is largely influenced by the final stages of agri-food commodity chains
- Agricultural pricing needs to be viewed from the agribusiness operation perspectives of the whole agri-food commodity chains.
- Monopsonistic and monopolistic power in the middle of the food-chain can distort market prices of agricultural produces at the farm level.
- Development and application of a normative model for the calculation of the farm level prices by taking into consideration of the size and scale as well as who manages, controls and finances farming and agribusiness operations and rural livelihood issues, would be an helpful tool to the concerned price monitoring and arbitrating authorities
- Farm Price calculation based on the living-Income approach could be one of such normative models.



References



- Arsyad Muhammad (2019). Prices of agricultural products and poverty: how strongly are the two linked? *International Journal of Agriculture System*, Vol. 7 Issue 2, December pp.
- Asiana, Sobhan, Ashkan Hafezalkotobb, and Jubin Jacob Johne (2019). Sharing economy in organic food supply chains: A pathway to sustainable Development *International Journal of Production Economics* 218 322–338
- Bacon, Christopher M. (2010). Who decides what is fair in fair trade? The agri-environmental governance of standards, access, and price, *The Journal of Peasant Studies*, Vol. 37, No. 1, 111–147
- Beckert, Jens (2011) Where do prices come from? Sociological approaches to price formation, *Socio-Economic Review*, Vol. 9, 757–786 April 27, 2011 doi:10.1093/ser/mwr012
- Bertsimas, Dimitris, Vivek F. Farias and Nikolaos (2011). The Price of Fairness, *Operations Research* Vol. 59, No. 1, pp. 17-31 issn 0030-364X | eissn 1526-54631111590110017 doi 10.1287/opre.ll00.0865 11 INFORMS
- Blount, Sally (2000). Whoever Said that Markets Were Fair? *Negotiation Journal*, July pp237-258, (Behavioural Science)
- Dexuan, L.I. (2016). Pricing power of agricultural products under the background of small peasant management and information asymmetry, *Asian Agricultural Research*, Vol. 8 (3):12-16.

Diller, Herman (2008). Price fairness, Journal of Product & Brand Management, Vol. 17 (5):353-355



References



Fehr, Ernst and Klaus M. Schmidt (1999). A theory of fairness, competition, and cooperation, *The Quarterly Journal of Economics*, Vol.114 (3):817-868

- HABIB, Shah Md. Ahsan; SHAH, Pinki.(2011). Prospect of Developing an Effective Agricultural Commodity Market in Bangladesh *International Journal of Economic Perspectives*, Volume 5, Issue 3, 293-302.
- Hazell, Peter, Colin Poulton, Steve Wiggins, and Andrew Dorward (2007). The Future of Small Farms for Poverty Reduction and Growth. 2020 Discussion Paper 42. Washington, D.C.: International Food Policy Research Institute.
- Kachelmeier, S. J., Limberg, S. T., & Schadewald, M. S. (1991). Fairness in markets: A laboratory investigation. *Journal of Economic Psychology*, *12*(3), 447-464.
- Kahneman, D., Knetsch, J. L., & Thaler, R. (1986a). Fairness as a constraint on profit seeking: Entitlements in the market. *The American economic review*, 76(4), 728-741. Article 1:
- Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1986b). Fairness and the assumptions of economics. *Journal of business*, 59(4), S285-S300.
- Kateryna Rechka (**2018**). Investigating market prices for agricultural production means and agricultural products, *Baltic Journal of Economic Studies*, Vol. 4, No. 3, 2018 DOI: https://doi.org/10.30525/2256-0742/2018-4-3-244-253
- Li, Wenjing, David M. Hardesty, Adam W. Craig (2018). The impact of dynamic bundling on price fairness perceptions, *Journal of Retailing and Consumer Services*, Vol. 40, January, pp: 204-212



References



- Maxwell, S., & Comer, L. (2010). The two components of a fair price: social and personal. *Journal of Product & Brand Management*.
- Muir, Jan (2001). Fair Pricing Regulation, Agenda, Volume 8, Number 1, 2001 pages 3-18
- Mujeri, Mustafa K. (2019). Fair prices for rice farmers: Simple idea but complex reality, The Financial Express, Monday, 3 June 2019, <u>https://www.thefinancialexpress.com.bd/views/fair-prices-for-rice-farmers-</u> <u>simple-idea-but-complex-reality-1559575964</u>
- Rotemberg, Julio J. (2004). Fair pricing, NBER Working Paper No. 10915, NATIONAL BUREAU OF ECONOMIC RESEARCH, 1050 Massachusetts Avenue, Cambridge, MA 02138, November.
- Rotemberg, Julio J. (2011). Fair pricing, *Journal of the European Economic Association*, Vol. 9(5):952–981 DOI: 10.1111/j.1542-4774.2011.01036.x
- Shui, Wenbing and Mengxia Li (2020). Integrated pricing and distribution planning for community group purchase of fresh agricultural products, *Hindawi Scientific Programming*, 15 pages https://doi.org/10.1155/2020/8839398
- Tony Haitao Cui, Jagmohan S. Raju, Z. John Zhang, (2007) Fairness and Channel Coordination. *Management Science*, 53(8):1303-1314. <u>https://doi.org/10.1287/mnsc.1060.0697</u>
- Varian, H. R. (1976). Two problems in the theory of fairness. Journal of Public Economics, Vol. 5 (3): 249-260.
- Viorel, Lefter and Aureliana Geta Roman, IAS 41 Agriculture: Fair Value Accounting, Theoretical and Applied Economics





??? Thanks