## World Academy of Science, Engineering and Technology International Journal of Agricultural and Biosystems Engineering Vol:17, No:03, 2023

## Medicinal Plants Supply Chain Innovations for Producer Surplus: Relationship Integration to Benefit the Rural Agrientrepreneurs in Bangladesh

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Abstract: This paper assessed the medicinal plants production and related entrepreneurial and management aspects with a focus to understand the present medicinal plants-based supply chain of Bangladesh. It delineated the overall supply chain and the extent of benefit that the plant-producing agrient repreneurs derive out of the existing system of the chain. The key objective was to put forward innovative supply chain strategiesthatcan leverage the benefit of the rural farmer-entrepreneur of medicinal plants. A field-based investigation was carried out in the Natore district of northwest Bangladesh, where a total of 225 farmers and households from eight villages were engaged in the production of medicinal plant species. The research had a survey with the agrientrepreneurs of two of those villages and focus group discussions at a union level to gather information about the price, buyers, seasonality, and overall supply infrastructure and trading mechanisms of the plant products. The research also gathered explanations on the overall supply chain system of the plants and plant-based processed products through key informant interviews with the local and regional selling agents, stockists, wholesalers, and secondary processors. The findings revealed that, in the existing supply chain system, the primary and wholesale secondary markets were mostly dominated by middlemen who cause market distortions and inflated prices due to a lack of coordination between the primary producers and secondary processors. The discoordination and inefficiencies in the supply chain system could be offset by the producer-processor relationship integration that could result in a multitude of benefits to both the parties in terms of price, quality, lead time, and overall control of the supply chain. Therefore, to ensure the growth of medicinal plants production, the industry users, secondary processors, and policy stakeholders should ensure that the primary producers get the fair share of the benefit; the producer-processor relationship integration in the supply chain offers to ensure that fairness with maximum producer surplus.

**Keywords:** medicinal-plants, agrientrepreneur, supply chain, relationship integration, Bangladesh **Conference Title:** ICREF 2023: International Conference on Rural Entrepreneurship and Farming

**Conference Location :** Istanbul, Türkiye **Conference Dates :** March 20-21, 2023