RISK MANAGEMENT IN AGRICULTURE AN EMERGING TREND IN COMMERCE

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Abstract

Risk has always been a part of agriculture. The rate of price volatility in agricultural produce would create uncertainty and risks, which could hamper the performance of the agricultural sector and negatively impact the income and welfare of the farmers. Besides, it will have a negative impact on overall economic growth, income distribution and poverty alleviation. Therefore understanding agricultural risks and the ways for managing it becomes important. Price volatility is perhaps the most pressing issue facing the producers of primary commodities. Agricultural production implies an expected outcome to achieve the expected returns. Variability in outcomes from those, which are expected, poses risks to the ability to achieve financial goals. In this context Price risk is returns from the investment in physical agricultural commodities will be reduced or lost due to a fall in the future market price of the commodity owned. Causes of Price Risksare like (a) Production Risk (b) Credit Risk (c) Institutional Risk (d) Market linked Risk . Methods of Tackling Price Risks handled in three ways like they may be (1) Retained – holding the risk, that is taking no protection for the downside risk (2) Avoided –Risks can be avoided fully by going for a totally new venture (3) Reduced –risks can be reduced or mitigated by different possible ways in order to get some assured income. However, the Narayana’s Wheel Model explains seven risk management strategies like (1) Self-insurance (2) Crop storage (3) Diversification. (4)Taking credit (5) Contract farming (6) Crop Insurance (7) Hedging in futures There are different methods for handling price risks. One among them is hedging in futures. Hedging, is the establishing of a position in the futures market that is equal and opposite intended position, in the cash market with an objective of transferring cash price risk. The advantages of hedging are hedging stretches the marketing period, hedging protects inventory values, hedging permits forward pricing of products. There are two types of hedging short and long hedge. A short hedge requires a short position in futures contracts. It is appropriate when the hedger already owns the asset, or is likely to own the asset and expects to sell it at some time in the future. Long hedges involve taking a long position in a futures contract. Long hedge strategy is used by dealers, consumers, fabricators, traders and processors etc, who have taken or will be taking an exposure in the

physical market. Cross hedging is the process of hedging a cash commodity in the futures market of a different, but related, commodity. Among the various risk management tools available in India, except crop insurance(14%) all other have got very negligible out reach. Hence, there is great challenges are rest on the extension machinery to diffuse these tools with an element of educating the pros and cons. Since these tools are to be handled with expert guidance only, our role will be more important. Therefore great care should be taken before advocating this knowledge to the farmers.

INTRODUCTION

There are many numbers of risks that are associated with the agricultural commodities, especially at the production,storage, transport, marketing and processing stages. Hence, it becomes important to identifythe cause for price risks and manage them is an essential tend in commerce. Price volatility is perhaps the most pressing issue facing the producersof primary commodities in commerce. Agricultural production implies an expected outcome or yieldto achieve the expected returns. Variability in outcomes from those, which are expected,poses risks to the ability to achieve financial goals. In this context Price risk is basically returns from the investment in physical agricultural goods or commoditieswill be reduced or lost due to a fall in the future market price of the commodity owned.Here it is important to understand the difference between risk and variability in commerce and management. It is well known that agricultural prices vary from month to month and year to yeari.e trend in commerce. However, if thevariation were predictable, farmers would face no price risk.

Emerging Needs and trends for Risk management in agriculture

Risk has always been a part of agriculture. The rate of price volatility in agriculturalproduce would create uncertainty and risks, which could hamper the performance of theagricultural sector and negative impact on the income and welfare of the farmers. Besides,it will have a negative impact on overall economic growth, income distribution and povertyalleviation in commerce. Therefore, understanding agricultural risks and the ways for managing itbecomes important. However, there are several causes for risks like:

(a). Production Risksas the demand for agricultural products is inelastic, supply shocks caused due toproduction variations are magnified in price variations in commerce. Agricultural production risks maybe due to those arising out of weather related factors, pests or diseases, farm andmanagement practices, genetics, machinery efficiency, quality of inputs and also due torisks from variable prices in commerce and management.

(b). Credit Risk has always been an important factor in improving agriculturalproductivity and strengthening the rural economy in commerce and management. However, complicated operationalmechanism of farm credit services, high transaction costs, uncomfortable repaymentschedules, higher interest rates, lower access to credit, heavy reliance on money lenders,insolvency problems etc have increased the associated price risks of the commodities in commerce and management.

(c). Institutional Risksif Government policy framework may come unwarranted that would create a profoundimpact on the prices in commerce and management. The government intervention sometimes instead of protecting mayresult in distortion of trade, as it does not let the natural market forces of supply anddemand in identifying the prices in commerce and management.Example like reform measures ,restriction on storage and movement of produces, directprice support measures, subsidies etc.

(d). Market linked Risks in a developing economy like India, wild swings in market prices due to supply anddemand factors arise due to nascent nature of such markets incommerce . Lack of participation, nonavailability or low dissemination of market information, infrastructure bottlenecks, marketstructure etc tend to increase the price risks in agriculture.

CHALLENGES OF COMMERCE FOR RISK MANAGEMENT IN AGRICULTURE

Price risks in agriculture may be handled in three wayslike(1) Retained – holding the risk, that is taking no protection for the downside risk (2) Avoided –Risks can be avoided fully by going for a totally new venture (3) Reduced –risks can be reduced or mitigated by different possible ways in order to getsome assured income in agriculture.

However, the Narayana's Wheel Model explains seven emerging strategies in risk management like (1) Self-insurance (2) Crop storage (3) Diversification. (4)Taking credit (5) Contract farming (6) Crop Insurance (7) Hedging in futures are explain like.

(1) **Self-insurance**forfarmer's to use the previous period's accumulated savings to protect themselvesagainst uncertainties that they cannot control.Further, the disadvantage istaken after risks occurs,results in reduction of assets.

(2) **Crop storage** is a means of avoiding seasonally low prices when there is expectationof price fall in the season and adequate price rise later. Further, financial resourcesand storage space are required which may limit the scope of this kind of riskmanagement. Further the disadvantage is (a)crop damage during storage (b)requires adequate financial resource to meet storing costs in agriculture

(3) **Diversification** is the combining of different production processes so that low incomein one will be compensate by higher income from other enterprises. It can includegrowing of different crops or different types of the same crop, mixed farming withcombining crops and livestock etc. Further the disadvantage is Capital investment required is increasinglyhigher

(4) **Credit support** taking farmers may lean on to credit given by government banks, cooperativesocieties, commercial banks, micro financial institutions etc as well as moneylenders. If collateral is insisted on advancing of the loan then this measure may not befeasible for poor farmers. Further, the disadvantage is Limited access of credit to most farmers

(5) **Contract farming** is normally associated with vertical integration,where an agribusiness firm coordinates all aspects of a producer from production toobtaining the end produce with stable market. Further the disadvantage is(a) A chances for either the farmers or contractor to default. (b) The producer loses the opportunity of benefiting from upside price potential. (c)Contracts may not be consistent with the producer's goals and risk tolerance in agriculture.

(6) **Crop Insurance** against the risks basically gives protection againstthe natural perils.Further the disadvantage isoperational inefficiencies delay the process in agriculture.

(7) **Hedging in futures** risk averse producers can buy protection from the risk taking speculatorslooking for profit.It involves establishing a position in the futures market that is equaland opposite of a position in the physical or spot market. Further, the disadvantage is (a) Less awareness among producers or farmers. (b) If there is a chance for upside price potential it cannot be taken advantage of and. (c) involves basis risk.

CHALLENGES IN HEDGING FOR RISK MANAGEMENT IN AGRICULTURE

Hedging is the establishing of a position in the futures market that is equal and opposite the position, or intended position, in the cash market with an objectiveof transferring cash price risk in commerce. However, Taking a position in the futures market that is opposite to a position in the physical market (i.e. buying in futures markets the quantity soldi n spot markets and vice versa, thus offsetting any loss attained in one market by a gain in the othermarket) Reduces or limits risks associated with unpredictable changes in price.The objective behind this mechanism is to offset a loss in one market with a gainin another in commerce and management. A temporary substitution of futures market transaction for a planned cash markettransaction goals of hedging in agriculture(**a)**Reducing the underlying volatility of your cash flows.(**b)**Minimizing the probability of large losses.Hedging based one two assumptions.(**a**)The future and cash commodity prices move up and down together ie the basis ofprice changes remains unchanged.(**b)** The mechanics of hedging includes the making of simultaneous transaction, but ofopposite nature, in the futures and cash markets.Hedgers could be Government institutions, private corporations like financialinstitutions, trading companies and even other participants in the value chain, for instancefarmers, extractors, ginners, processors etc., who are influenced by the commodity prices in commerceadvantages of hedging are like(a). It protect the hedger from sustaining loss and enables him to earn to normal tradeprofit(b). Hedging enables farmer keep the trade margins at a lower level to casue there isno risk(c). It facilitates the financing of inventories of stored commodities to the maximumpossible extent.

LIMITATIONS OF HEDGING

(a) In reality, hedging is not quite simple and straightforward and are not perfect.

(b) Hedging can only minimize therisk but cannot fully eliminate it.

(c) The asset whose price is to be hedged may not be exactly the same as the assetunderlying the futures contract.

(d)Often the hedgemay require the futures contract to be closed out well before itsexpiration date. This could result in an imperfect hedge.

(e) The expiration date of the hedge may be later than the delivery date of the futurescontract. When this happens, the hedger would be required to close out the futurescontracts entered into andtake the same position in futures contracts with a laterdelivery date. This is called a rollover.

(f) Hedgescan be rolled forward many times. However, multiple rollovers could leadto short term cash owned problems in agriculture.

CONCLUSION

There are two types of hedging short and long hedge in commerce and management. A short hedge is a hedge thatrequires a short position in futures contracts in agriculture. It is appropriate when the hedger alreadyowns the asset, or is likely to own the asset and expects to sell it at some time in the future.Hedges that involve taking a long position in a futures contract are known as long hedges.Long hedge strategy is used by dealers, consumers, fabricators, traders and processorsetc, who have taken or will be taking an exposure in the physical market. Cross hedging isthe process of hedging a cash commodity in the futures market of a different, but related,commodity. Among the various risk in commerce and management tools available in India, except cropinsurance(14%) all other have got very negligible out reach. Hence, there is great challenges are rest on the extension machinery to diffuse these tools with an element of educating thepros and cons. Since these tools are to be handled with expert guidance only, our role willbe more important. Therefore, great care should be taken before advocating this knowledgeto the farmers. Risk has always been a part of agriculture. Price volatility is perhaps the most pressing issue facing the producers of primary commodities. The different causes of price risks areproduction risks, financial risks, institutional risks, and market-linked risks. There aredifferent methods for handling price risks. One among them is hedging in futures. Hedgingis, the establishing of a position in the future market that is equal and oppositethe position, or intended position, in the cash market with an objective of transferring cashprice risk in agriculture. The advantages of hedging are hedging stretches the marketing period,hedging protects inventory values, hedging permits forward pricing of products in commerce and management.