VALUE CHAIN INITIATIVE

Canada

Agriculture & Food Council
The Catalyst

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How to identify and implement a pricing scheme that works best for my Value Chain?

A practical guide

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1 Introduction

The purpose of this document is to help firm owners and managers identify and implement a pricing scheme to fit their value chain. It assumes that you already have a current partner(s) in mind with whom you want to build, expand or restructure a value chain (or that you have established contacts). The pricing scheme through which risks and returns may be shared is often a central issue. Therefore, this guide focuses on practical issues that relate to the implementation of successful pricing schemes among value chain partners.

1.1 Overview on suggested steps

This section gives you a brief overview on what is forthcoming in section (2). You could proceed in three steps if you are in the early stages of developing your partnerships. There is no silver bullet, since value chain ownership structure and size can differ immensely, but there are some general principals that have worked for successful value chains in the past. The following suggestions try to build upon past successes. As you go through these "steps" it is important to be flexible and choose the steps/tools that appeal to you most. Nevertheless, try not to skip too many as they are meant to challenge you, provoke discussion, and help you rethink your current practices.

1.1.1 Assess the value of your value chain relationships

(a) Analyze your current business

- Before you sit down with your partners and/or your outside facilitator to discuss your strategy, I suggest you individually go through the *value chain assessment checklist* (attachment to this document). It is meant to give you some suggestions on how to assess your current and/or past business partners, and help you think about a risk profile for yourself and your alliance partners.
- After discussing the *value chain assessment list*, continue with personal meetings to ensure that all the basic issues have been addressed:
  - ⋆ How are production costs presently determined?
  - ⋆ What data is shared at present, and how?
  - ⋆ What monitoring/auditing mechanisms are currently in place?

(b) Check how well-aligned your value chain is

In order to check how well aligned you and your partners (potential partners) are in delivering the product/service that your value chain aims to deliver, complete an incentive check of your current business and performance measurement practices. Incentive checks have two main objectives:

⋆ Assess manager/ key stakeholder incentives by discussing and thereby indirectly revealing misperceptions and impediments to optimal performance.

⋆ Reveal the expected contribution of each participant in the emerging value chain.

Incentive checks have two steps:

(1) Discuss how you can improve the whole chain's performance with your partners (or your facilitator) individually. Assess **current** causes of incentive problems related to your chain's pricing scheme.

⋆ Are your current incentive problems related to unobserved information and/or investment that you require from your partners, or that is required from you?

- Why does data sharing/monitoring currently not take place, i.e. why does your pricing scheme not share potentially available information?
- Is your pricing scheme currently not as effective as it could be because certain information (e.g. on costs, quantity or revenue) is not taken into account?
- Does your pricing scheme/price grid send out undesirable signals to other chain members, i.e. give incentives to produce undesired qualities product that lower profitability and/or does not meet consumer demands?
- Is your pricing scheme complex and in-transparent, so that it sends undesirable signals to your value chain partners?

(2) What can you do to prevent incentive problems before **expanding** your value chain further?

⋆ Check your agreements/contracts to ensure that the price and non-price incentives therein are consistent with what you expect from each other!

(i) Try to identify decisions that would be made differently if you had the entire, emerging value chain in mind! It may be best to use an independent, outside facilitator to check on value chain participants' willingness to act differently with regards to monitoring, data sharing, asset ownership sharing or other managerial decisions.

(ii) Try to reveal how aware you all are about each others' constraints!

(iii) What do you individually think are the key risks, and how does your perception differ from that of other value chain partners?

(c) Risk analysis in production, processing, operations management and marketing

Once you have revealed what you each consider key risk factors, it is worthwhile to put some actual figures on those risks, and ask: how do our perceptions of the risks withstand a more objective risk assessment? Do a more extensive volatility analysis yourself, or use an outside party to assess your production, processing and/or marketing risks!

1.1.2 Operationalize the implications from assessing risks and incentives

(a) Identify operational roles and decision rights for each party

⋆ Identify the managerial board, and meeting schedules for specific tasks.

(b) Create effective contracts and successful pricing schemes

- Are the contracts based on parameters that ultimately provide what the consumer wants, or are your contracts largely supply-side driven?
- Does the pricing scheme give appropriate incentives to deliver the qualities desired? For example, is a return-based (revenue sharing) contract best for you, where cost-based pricing is used to establish only the basic parameters?
- What are the criteria for sharing information between value chain participants - are they based on the value chain ownership structure?
- Who is paid for what qualities, and when?
- What monitoring and auditing mechanisms are in place - are they sufficiently tight in the eyes of the end-customer?
- Can you agree on a pricing scheme, such that cost, price and quantity shocks that occur to individual value chain members are shared by all members?

2 Identifying and implementing a pricing scheme that fits your value chain

2.1 Introduction

In order to achieve optimal coordination in your value chain, there are several managerial levers that can be addressed, including information sharing, the design of incentive and pricing mechanisms, and the building of cooperation and trust.

The following sections outline several **strategic steps** that aim to give an emerging value chain the maximum possible basis for success. Although these are self-explanatory, you may be interested in a facilitated workshop, in which these issues can be discussed in more depth. Why could this be worthwhile?

What's in it for my firm?

- Your participation in such a workshop gives you a clear *first-mover advantage*:

  ⋆ The strategic steps that will be discussed below are aimed to give you a competitive edge by providing concise checks and balances, many of which differ from those that are typically used in practice.

- Your *competitive edge* through participating in such a workshop setting can also pay off in the long term:

  ⋆ Sharing these insights with other participants within your industry will not take your strategic benefits away. Every value chain development is unique such that applying the following tools will result in very different, firm-specific implications and recommendations.

  ⋆ The Agriculture and Food Council through the value chain initiative can help you to identify funding agencies in which your value chain may be eligible to make applications for project funds.

2.2 Assessing the value of your value chain relationship

Experience shows that it is worthwhile to devote major efforts during the early stages of your value chain to establish clear *criteria for evaluating the overall success* of the relationship, as well as establish the *expectations from each value chain member*. Consider the following key issues:

- What is the contribution expected from each value chain member, and what are the expected risks that each of them will be faced with?
- Will returns be shared equitably - are all parties satisfied with the degree of fairness in the division of the total returns?
- How does the value chain *monitor* and adjust the partner's contributions?

In order to answer these questions, it is important that all value chain members begin with some very open discussions. Sometimes an outside facilitator can help best to reveal how you each *perceive* your own contribution and risks, and the contributions and risks of your value chain partners. Performing risk analyses (section 1.1.1) together with incentive checks (section 2.2.2) can help all parties not only to visualize their contributions and risks, but also promote mutual understanding, trust and a common vision.

2.2.1 Initial strategic meetings

In these initial meetings it may be worthwhile to have an independent third party on board, to provide a fresh, outside perspective. These meetings can have two objectives. First, to agree on the strategic steps that will be taken in the coming months in order to prepare and implement the pricing scheme and auditing mechanisms. Second, to discuss where key internal organizational strengths and weaknesses lie, and what information is available on external market opportunities and threats from competitors. The following examples show how these points can be broken down:

(a) Analysis of the internal organization of our current firms/value chain

What are our strengths?

e.g. management competencies can be drawn from experiences in other industries; a well-established relationship exists with a broker firm that is familiar with our key target markets

What are our weaknesses?

e.g. our current financial resources; the lack of strategic planning; the limited processing capacity and experience

(b) Analysis of our industry environment

What are the key market opportunities?

e.g. there is an untapped national market potential; there are untapped niche markets; we can see a potential to market our key product as a complement with other foods/products; by complementing our product portfolio or expanding into other species, we can use our processing and marketing capacities more effectively to reduce costs

What are the key market threats?

e.g. the threat of an emerging national domestic competitor; the threat of other processors of buying up and depleting the most attractive input markets

2.2.2 Check how well-aligned your value chain is

Once you have identified the relevant internal organizational issues, as well as the external market opportunities and threats, it is often worthwhile to perform an *incentive check*. This will promote general awareness of key managerial challenges and opportunities, and help to foster a common vision throughout the chain. For this step, it can be valuable to use an outside, independent facilitator. But as a start, you may want to sit down with that business partner whom you trust most, and discuss the following steps yourself. Then you could contact the Agriculture and Food Council to inquire further into going through this process with a facilitator.

Overall, the objective of this *check* is to examine the managerial incentives that are in place between your value chain members, or the incentives that you are planning to put into place through your envisaged contract and pricing scheme. The following points are meant to stimulate discussion, if you want to start with an incentive check yourself:

1. Let's say you are planning to expand your current value chain, and include another producer or processor: ask yourself and your closest alliance member whether you can identify decisions that you each would make **differently**, if you had the interests of an enlarged value chain in mind.

2. Challenge both yourself and your closest alliance member: make a list of what you consider are the key **constraints** of your partnering firm(s) - ask yourself what financial or organizational constraints you envisage for the other partner, and how this could affect your expanding value chain in the future.

3. Make a list of what you consider are the key **risks** of your partnering firm(s): risks in production, processing, marketing.

Now, let us say you have gone through these three issues yourself. What is the point of using an independent outsider/facilitator afterwards?

1. Use the outsider facilitator to settle the more uncomfortable questions, with those alliance partners with whom you have not established a settled trust-relationship! The facilitator needs to trace differences in decision-making (first point above) and the perceptions of constraints (second point above) to his own analysis of constraints of the partnering firms.

2. In anticipation of designing an equitable pricing scheme for your value chain, the facilitator should use discussions over the above two points in order to reveal any misperceptions or scope for opportunism! Ask the facilitator to come up with a list of formal and informal performance measures for each member of your value chain, and benchmark your own ideas on performance measurement against his outside view!

3. Ask the outside analyst to relate the discussions on differences in decision-making (first point above) and your perceptions of constraints (second point above) to the risks that you all face: are certain production, processing or marketing risks over- or under-estimated by yourself or other members in the value chain? Are you willing to open up your books and give the facilitator the necessary information to check how variable your production, processing and marketing activities are, so that your own perceptions can be benchmarked against further facts and risk projections?

2.3 Developing a strategic plan

A further benefit from going through the above steps (sections 2.2.1 and 2.2.2) is that you are now well-prepared to develop a strategic plan (as part of, or outside of a business plan). This plan can spell out (a) the operational roles of each value chain partner, (b) mechanisms for sharing information (e.g. web-based) and time-schedules for implementing these, (c) contractually based pricing agreements for sharing risks in production, processing and marketing, and (d) mechanisms for conflict resolution.

2.3.1 Identifying operational roles and decision rights for each party

At this stage, a deep mutual understanding of constraints, tasks and opportunities should be present. The allocation of decision rights is then no longer a major challenge. It is generally advisable to determine decision rights and thus access to information based on who owns which assets in the value chain. Once managerial roles have been determined, the pricing schemes and contracts naturally become a central issue.

2.3.2 Creating effective contracts and successful pricing schemes

Experience shows that it is generally advisable to design rather open and flexible contracts at the beginning of establishing a value chain. Contracts that evolve over time are more likely to be effective and successful than those that are strictly and more completely defined at the beginning of a chain's evolution.

The challenge becomes now to decide on a particular pricing scheme. As a rule of thumb, we know that successful pricing schemes are highly consumer-oriented, and are able to translate the demands of the consumer into incentives for quality provision most effectively. But there's a second factor that distinguishes successful value chains: their members take a longer term, strategic perspective, such that growth, certainty of input supplies, revenues and profits take priority over short term profitability.

So, what types of contracts and pricing schemes helped those value chains to succeed? What could work best for your value chain?

Relying on pricing schemes that are continuously to be re-negotiated?

Experience shows that those pricing schemes which rely heavily on bargaining have a clear disadvantage. First, when there are significant differences in bargaining power between value chain members, there are strong incentives to abuse those differences. Second, since today's information technologies allow us to get a much better grip on what the consumer really wants, and what qualities paid best, those pricing schemes that rely on hard facts (e.g. grid pricing) have clear advantages. That's why we've put so much emphasis on identifying the contribution of each chain participant as in section 2.2. So, the first suggestion is: build the pricing scheme of your value chain around the most efficient way of exchanging information on costs, risks and returns. Then, decide on how these should each factor into a coherent compensation scheme or pricing formula. But first of all, start by looking at the broader picture!

How does your pricing scheme fit into the organization of your value chain?

Before you all agree upon a new pricing scheme, experience suggests that it is best to ask yourself a few general questions:

- How does the pricing scheme fit in with my other organizational decisions (e.g. means of sharing information, existing contracts with a retailer)?
- Will the pricing scheme be best suited with our structure of asset ownership (e.g. are you all independently owned firms, or do you share some joint assets)?
- Can you create synergies by implementing certain activities in conjunction? Or, can you at least ensure that implementing a pricing scheme will not backfire, and lower profitability, since you have not fully accounted for how the pricing scheme will interact with other factors that you had implemented before (e.g. types of quality assurance, monitoring)?

These points deserves further emphasis. As a rule of thumb, previous value chain examples show that it's worthwhile to think in systems, or holistically. Managing your pricing scheme and building your value chain is then like building a plane: implementing the smallest new or additional component needs to take the implications on the whole system into account - otherwise it will have catastrophic consequences when you are trying to take off! Implementing your pricing scheme requires thinking in systems: it is desirable to adjust your information exchange with all value chain partners, revise your types of quality assurance, your means of monitoring and your current bargaining procedures, all in conjunction with each other. It is key that your pricing scheme is adjusted - and fits - when the ownership stakes change in the value chain. It is key that the new pricing scheme fits best with the other facets of your value chain, such as your quality monitoring, so that, for example, you do not get surprised by a process that creates unwanted incentives to some of your members.

Although there is, again, no silver bullet in terms of *the* pricing scheme for your value chain, there are several past managerial lessons that we can learn from:

1. It pays off to bundle and complement activities in your value chain, so that they can reinforce each others' effectiveness.

   ⋆ Centralizing authority over the allocation of benefits to individual chain members, say, through an initially agreed upon pricing formula fits well with an automated, electronic value-based pricing scheme (e.g. automatic price adjustments for quality).

   ⋆ A high degree of interconnectedness and intensive information exchange is complementary with giving a high degree of flexibility to your value chain partners (flexibility in daily decision-making and the means of achieving certain levels of performance).

2. Use a pricing scheme that depends as little as possible on factors that can be easily manipulated: heavily negotiated pricing schemes belong to the past!

A pricing scheme needs to be muted and balanced, since you do not want to over-compensate those output qualities that can be easily measured, at the expense of the delivery of qualities that are more difficult to measure.

3. Use a flexible pricing scheme: pure cost-based pricing schemes belong to the past, as they have proven to be inflexible and incapable to accommodate the natural variability in costs and returns.

4. Develop your pricing scheme with the evolution of your value chain: although some managers may consider margin-sharing as their ultimate objective, start with more modest goals. Share more information, mutually, as you go along, instead of conditioning your first step on another value chain partner's willingness to open up his books.

   ⋆ Start with a risk-based analysis (of costs and/or revenues), and use this to develop a risk-based-sharing pricing scheme.

   ⋆ A risk-based analysis helps to reveal your individual contributions (individual value chain levels and members therein), and the individual risks that you will have to bear/bear currently.

   ⋆ If your value chain members have *joint asset ownership stakes*, you may now be in the position to implement a return/revenue-sharing pricing scheme: you have identified the variability that underlies your production, processing and marketing operations, and once you make this information transparent to your chain members, you will all see what consistency in quality and quantity supply is actually worth. Use this momentum to implement a transparent, return-based pricing scheme, in which your individual risks can be counterbalanced through longer-term commitment (longer than one full production cycle)!

   ⋆ If you do not have *joint ownership stakes*, it pays off to remain flexible and transparent: when market opportunities open up, you may want to team up with a new, independent business. Use and expand the same rules to this new business for creating transparency on risks that you have applied to your existing value chain. However, use this information primarily to adjust your pricing scheme (the size of your bonuses/discounts), but refrain from chaining yourself to a revenue-sharing scheme.

2.3.3 Designing effective conflict resolution mechanisms

Let us assume that you have improved information sharing as the value chain matures. We expect that trust and cooperation will be strengthened and conflict resolution will be facilitated. But experience shows that more formal mechanisms are needed to facilitate discussions before they turn into real conflicts: frequent and regular meetings between key stakeholders are a natural first step. But, depending on your industry and the differences in bargaining power between value chain levels, it may be desirable to write conflict resolution mechanisms explicitly into contracts.

2.4 Monitoring mechanisms

Once the individual contributions and risks of all value chain members have been assessed and the pricing scheme is in place, it is important to design flexible mechanisms that allow chain members to periodically monitor the relationship and adjust contributions and the allocation of benefits. Experience shows that the commitment to such ongoing monitoring needs to come from the top management. It needs to be institutionalized, so that these monitoring mechanisms are truly de-personalized, and remain solid as the management team and management structure may change.

2.5 Implications for production, processing and marketing

For any consumer-oriented value chain, the production should naturally begin only when the target market has truly been identified. Then, a step-wise approach is natural and advisable: either gradually build your total capacity, or, assuming that you currently produce/process for different channels, gradually divert existing production and processing capacities as the value chain develops. This incremental approach will give you the desirable flexibility, help to reduce the risk of failure and develop the necessary trust relationships.

2.6 A final word

By now you've gone a long way in preparing the launch of your new plane. As David Price has put it in the context of the Sunterra value chain,

> "*Out of understanding will come the strength to build successful relationships with whatever customers we work with ... .*"[1]

What keeps your plane flying are the notions of flexibility, transparency and coherency in managing your operations. This document has tried to be a first step in helping you to implement those notions in practice.

[1] Price, D. *Making More Profit with Value Chains - The Sunterra Experience*, Advances in Pork Production (2001) Volume 12, pp. 99-102.