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Small-scale producers in modern agrifood markets

Innovative Practice

India
Marketing cooperatives in a new retail context: A case study of HOPCOMS

Deepthi Kolady, Sujana Krishnamoorthy and Sudha Narayanan
Cornell University

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An "Other" Revolution?
Marketing cooperatives in a new retail context:
A case study of HOPCOMS in India

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1 Executive Summary

Across the developing world, retail sector transformation is spearheading fundamental change in local food systems, with the relative position of the small farmer coming into serious question. The new retailers have focused on disintermediation in the supply chain to benefit both farmers and consumers. Notwithstanding the income gains that accrue, a relevant question is the extent to which this retail transformation is inclusive of small-scale farmers in the first place. Even when retail transformation is inclusive, will eventual retail consolidation itself pose particular problems for smallholders, weakening their relative bargaining power? This is a particularly critical question for India, which is a nation of small-scale farmers, many of whom are growing smaller.

In this context, there is an urgent need to keep small-scale farmers firmly in the picture. A first step is to document alternate institutions that attempt to link up small producers with markets. India has a rich tradition of successful public sector institutions that have empowered small producers by aggregating their interests into state-managed co-operatives. In this study, set within the larger framework of the Regoverning Markets Project, we look at one such state-managed farmer co-operative—the Horticulture Producers Co-operative Marketing and Processing Society Limited (HOPCOMS)—in the south Indian state of Karnataka. With its focus on vertical co-ordination and disintermediation, we argue that HOPCOMS, and institutions like it, can perform an innovative role in the new retail landscape.

Using extensive field visits, interviews with actors in HOPCOMS and outside, and a survey of 186 farmers spread across six districts around Bangalore and Mysore, we assess HOPCOMS' success in acting as a counterbalance for small-scale farmers in the modern retail environment.

Through low-cost means, HOPCOMS obtains produce from the farmers and sells it on to consumers through a network of decentralized procurement centres and scattered retail outlets. We recorded the following benefits to many smallholder farmers who use HOPCOMS:

- reduced transaction costs
- increased revenue
- a secure outlet for their produce
- fair prices
- availability of inputs
- an indent system which favours smallholders over large producers

Our field interviews highlighted some challenges still to be resolved, such as the indent system that restricts quantities, and the strict quality controls. Another important drawback is that HOPCOMS is not a true co-operative because decision-making is not bottom-up and so members do not have a sense of ownership of the society. Its half-hearted entry into processing and discontinuation of crop advice services to farmers in many centres indicate inefficiency in day to day operations.

How sustainable is HOPCOMS as an institution, and how easily can it be replicated and scaled-up? HOPCOMS benefits from government subsidies for infrastructure but not for daily operations. In the face of hefty retail competition, however, its sustainability as a profit-making entity is not assured. At this time of change, HOPCOMS could capitalize better on its backward and forward linkages and could become more attractive to farmers without much investment in market promotion. Strong management with a clear vision for the future could bring efficiency and success to the organization.

The HOPCOMS model provides exciting opportunities for replication because the preconditions for success are minimal and not peculiar or unique to the region it operates in. Clearly, necessary preconditions include suitable agro-climatic conditions for horticulture; the existence of demand for horticultural produce; and government support for initial investments and supportive government policies.

The study shows that despite its many problems, HOPCOMS represents an "other" revolution paralleling the private sector-driven retail revolution. But the danger is that co-operatives such as HOPCOMS will be undermined by the large changes underway. There could be considerable value in preserving them, in scaling-up and replicating successful models if small-scale farmers are not to be left behind by the retail revolution.

2 Introduction

2.1 Background

There is widespread agreement today that across the developing world retail sector transformation is spearheading fundamental change in local food systems. Until recently in India, less than 5 per cent of retail food sales took place in the organized sector. This is changing, and it is now eminently clear that the retail revolution in the agrifood sector in India is well underway. Organized retail operations are now present in 74 cities, up from 18 a year ago, and are growing at the rate of 30-40 per cent per year (Gulati and Reardon 2007). A large number of domestic players, such as Big Bazaar, Spencer's, Reliance, Bharti and Choupal Fresh, have ambitious plans for expansion and foreign players are devising ways to enter the Indian market.

At a time when the retail sector is witnessing such a massive and fundamental institutional shift, the relative position of the small-scale farmer comes into serious question. The new retailers have focused on disintermediation (the removal of intermediaries) in the supply chain in order to benefit both farmers and consumers. Notwithstanding the income gains that accrue, a relevant question is the extent to which this retail transformation includes small-scale farmers in the first place. Small-scale farmers face particular constraints in meeting the quality demanded by the formal retail sector. Even when retail transformation is inclusive, will eventual retail consolidation itself pose particular problems for smallholders, weakening their relative bargaining power? And what might become of those who fail to be part of the supply channel? This is a particularly critical question for India, which is a nation of small-scale farmers,[1] many of whom are growing smaller.

In this context, there is an urgent need to keep small-scale farmers firmly in the picture; documenting institutions that attempt to link up small producers with markets is an important first step. In this study, we look at one such venture: a state-managed farmer co-operative called the Horticulture Producers Co-operative Marketing and Processing Society Limited (HOPCOMS), in the south Indian state of Karnataka.[2]

2.2 Motivation and scope

India has had a rich tradition of successful public sector institutions that have empowered small producers by aggregating their interests into state-managed co-operatives. The shining example is, of course, Operation Flood,[3] which enabled farmers with backyard livestock to access dairy

[1] Households with land totaling 1 hectare or less accounted for 66% of all farmer households in India, according to the *Situation Assessment Survey of Farmers*, NSS 59th Round, National Sample Survey Organization (NSSO), India, May 2005, Report no 498.

[2] Karnataka is India's third largest producer of fruit and is in fifth position in terms of area and production of vegetable crops.

[3] For more details, see http://www.nddb.org/aboutnddb/operationflood.html

markets they couldn't have reached on their own. Today it has established Amul as a billion dollar brand. More recently, Safal, promoted by the National Dairy Development Board, has entered the fruit and vegetable sector and operates in cities such as Delhi, Mumbai and Bangalore. This is indicative of the potential of public sector institutions to not only enable market access, but also to make smallholders active participants through partial ownership.

In some ways, HOPCOMS, with its focus on vertical co-ordination and disintermediation, predates the "new" retail philosophy by decades. We hope to demonstrate, through the HOPCOMS case, that these institutions can perform an innovative role in the new retail landscape. Indeed it is our belief that such institutions might be increasingly relevant in the new context. On the one hand, small and poor farmers may be excluded from the networks of large private sector retailers unless they get technological and organizational assistance, while large-scale farmers may prefer to tie up with large-scale private retailers. In this case, alternate institutions need to be nurtured to redress the balance which is tipping away from small-scale farmers. Even if such bias does not exist, by being viable alternatives to large-scale retailers, these institutions empower the small farmer by expanding their choice of marketing channels. The case of HOPCOMS, despite its many failings and problems, invites us to consider the possibility of an "other", alternate, revolution paralleling the private sector-driven retail revolution. Rather than letting co-operatives such as HOPCOMS be undermined, there might be considerable value in preserving them, in scaling up and replicating successful models.

This study draws on the larger framework of the Regoverning Markets Project. Our approach is to characterize HOPCOMS as an institutional innovation. Through extensive field visits involving interviews with actors in HOPCOMS and outside, combined with quantitative information from a survey of 186 farmers in Karnataka, we aim to contribute five essential insights into small farmer participation in dynamic markets (Berdegue *et al*. 2006):

1. What are the drivers of inclusion?
2. What financial and non-financial costs and benefits do small-scale producers obtain from their inclusion in dynamic markets?
3. What amounts of direct and indirect subsidies have contributed to the innovation (i.e. HOPCOMS)? What implications does this have for its sustainability?
4. What public and private policies will contribute to the up-scaling of the innovation?
5. What lessons can be derived for public and private policies to promote market inclusion of small-scale producers elsewhere?

We explore how this innovation in theory translates into practice. What in its design works well and contributes to sustained smallholder participation? Where does practice fall short and why? What implications does the deviation of theory from practice have for scalability and replicability? We also compare two independent HOPCOMS entities—a profit-making branch in Bangalore and a loss-making one in Mysore—to discover what distinguishes the performance of the two, and thus determine what makes a successful intervention.

3 The context

3.1 Macro-context: horticulture in India

India is the world's largest producer of fruit, and the second largest producer of vegetables. The perishable nature of the produce, along with other constraints such as poor quality planting materials, lack of market access, and lack of technical advice, make the sector less attractive to smallholders in India.[4] But as the government tries to wean farmers away from the rice-wheat system, it has tried to persuade smallholders to take up high value crops like fruit and vegetables, in what has often been called the Golden Revolution.

The agricultural market in India is dominated by rural primary markets that meet local demand; secondary markets that serve more distant needs; and wholesalers who gather produce from different sources for retail in the country. The objective of the regulated markets established by the government was to regulate trade practices, increase marketing efficiency by reducing marketing charges, eliminate intermediaries and protect the interests of the producer-seller. Though regulated markets helped to reduce multiple charges to the producer-seller, the system failed to check trade malpractices, making such markets highly restrictive, inefficient and dominated by traders.

To overcome the defects of regulated markets and to increase productivity, a direct marketing system parallel to the existing system was sought to be put in place. This will be outside the purview of the Agricultural Produce Marketing Committee (APMC) and will hence ensure transparency, efficiency, quality control and fair play. Direct marketing by farmers was experimented with via *Apni Mandis* in Punjab and Haryana. A modified concept was introduced in *Rythu Bazars* (AP) and *Uzahvar Santhaigal* (TN). In the meantime, private players such as Cargill India, Mahindra, ITC-e Choupal, Bharti etc., have emerged with sophisticated supply chain management systems and vertical co-ordination.

3.2 Meso-context: the agrarian context of Karnataka

In spite of being almost synonymous with the booming software and service sectors, Karnataka is still primarily an agrarian state; 66 per cent of the state's total population resides in rural areas, and is engaged in agriculture and allied activities.[5] However, the agriculture sector in Karnataka has registered low growth rates (between 2 and 3 per cent a year) over the last three decades, a period marked by droughts and natural calamities.

Rainfed agriculture is still the order of the day, with only 26.5 per cent of the gross cultivated area irrigated. Most of Karnataka's farmland lies in the low rainfall region. Small (1-2 hectares)

[4] For more information see http://www.tifac.org.in/offer/vis/fruits.htm

[5] Agriculture contributes 21% to the state's GDP, while the secondary sector contributes 25% and the tertiary sector 52% (Karnataka Agricultural Policy 2006).

and marginal (less than 1 ha) farmers predominate, accounting for 73 per cent of the total holdings. The average size of an operational holding is 1.74 hectares.[6]

With its ten agro-climatic zones and nine distinct soil types, Karnataka is ideally suited for horticulture.[7] The Karnataka Agricultural Policy (2006) aims to move away from traditional grain-based agriculture towards crop diversification, and promotes horticulture, poultry and livestock. As horticulture provides higher unit productivity, requires less labour, is more remunerative and has greater scope for value addition, it is favourably viewed by farmers at large and is spreading throughout the state. Horticultural crops are grown on 13 per cent of the net cultivated area of the state (16.3 lakh hectares) and produce annually 95.81 lakh tonnes. The total income generated from the sector accounts for over 40 per cent of the total income derived from the state's entire agriculture sector and comprises 17 per cent of the state's GDP.

3.3 Micro-context: Bangalore and Mysore

Smallholder agriculture in southern Karnataka is best understood in the context of the trajectory of Bangalore's spectacular growth. Ever since the 1990s, Bangalore, once known as the pensioners' paradise, has been growing at an estimated 30 per cent in size thanks largely to a booming information technology industry. The layout of the city has been changing rapidly, especially in the past decade (Nair 2005). As software and real estate companies drive land prices up, agriculture is shifting farther into the hinterland.

Urban water demands have also rendered peri-urban agriculture an extraordinarily difficult proposition in recent times.[8] Faced with increasing production costs, an eroding resource base and escalating land prices, farmers have been tempted to sell out. For those further out in the countryside, where the real estate windfall has not struck (as yet), these difficulties have prompted them to switch out of cultivation into occupations like silk rearing, which are relatively less resource intensive and for which the government offers price support.

Thus, on the one hand the growing demand for horticultural crops provides a great incentive for commercial cash crop cultivation in areas around Bangalore.[9] On the other hand, the rising land prices and eroding natural resource base presents a countervailing force to give up the land for alternative uses. How these competing demands on the land will play themselves out is open to question. The answer depends, not to a small extent, on whether there are enough incentives and appropriate institutions to enable smallholders to tap into the large markets.

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[6] Agricultural census, 2000-01.

[7] For details visit: http://horticulture.kar.nic.in/horticulture_development_scenari.htm

[8] This was apparent throughout the course of the survey. As one farmer emphasized, until five years ago, the water table was at 75 feet; at the time of the survey, a farmer was considered lucky who hit water at 1000ft.

[9] The growing middle class in India is more health conscious and prefers a diversified diet comprising meat, fruit and vegetables. This is a change from the earlier generations who preferred low value large grain food.

While this is especially true of Bangalore, the much smaller city of Mysore is not far behind.[10] Mysore is now regarded as the alternate destination for investment by the IT sector and being developed as a satellite city to Bangalore. Today Mysore is poised for growth in almost the same way Bangalore was a decade ago.

[10] Based on the 2001 census, the population of Bangalore Urban and Mysore Districts are 6.5 million and 2.6 million respectively.

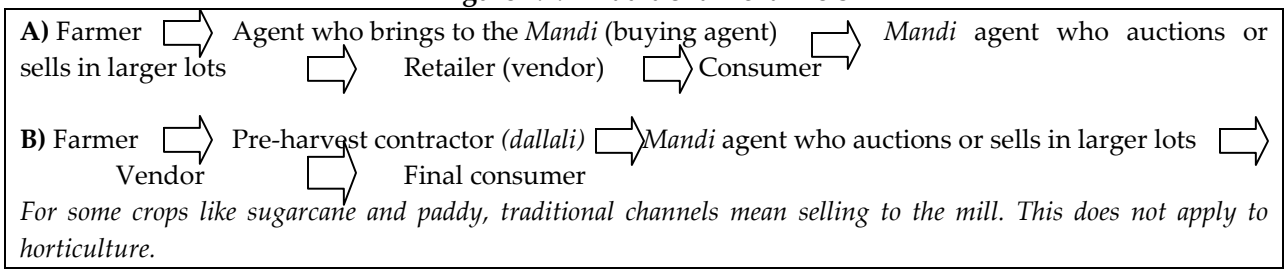
4 HOPCOMS as an innovation

4.1 HOPCOMS in the context of other horticultural marketing channels

As in other developing countries, most farmers depend on relation-based transactions rather than rule-based arrangements. Most horticultural producers market their produce through commission agents and intermediaries. This reduces producers' share in the market price of the produce, while increasing the marketing cost and retail price for consumers. Due to the perishable nature of the produce, poor marketing facilities and lack of education, poor and small-scale farmers tend to be exploited by these middlemen. The traditional and predominant supply chain is long, involving as many as five or six intermediaries before the product reaches the final consumer.

The traditional channel involves markets regulated by state agencies, although the regulation is often only in name (Figure 4.1). Most of the fruit and vegetables in larger cities and towns are traded in the central market area, usually the municipal market. The wholesale trade of fruit and vegetables is carried out by the commission agents and the trade is through small auction sales or negotiated sales in terms of baskets/bags etc.

Figure 4.1: "Traditional" channels



For some crops like sugarcane and paddy, traditional channels mean selling to the mill. This does not apply to horticulture.

Recent changes have introduced a greater diversity of marketing channels in Karnataka (Figures 4.2 and 4.3). In particular, horticulture marketing has been the focus of special efforts. At state level an apex federal body, Karnataka State Horticultural Co-operative Federation (KHF), has been established to perform activities similar to those of the Karnataka Milk Federation. Direct marketing initiatives through farmer markets or *Raithara Santhe* have also been established by the Karnataka State Agricultural Marketing Board. The board has created infrastructure for marketing fruit and vegetables directly from the growers to the consumers without any middlemen or commission agent. The Safal fruit and vegetable auction market—a project implemented by the National Dairy Development Board—is developing cash and carry stores in prime localities within cities, as are other private sector players.

Figure 4.2: Direct sales

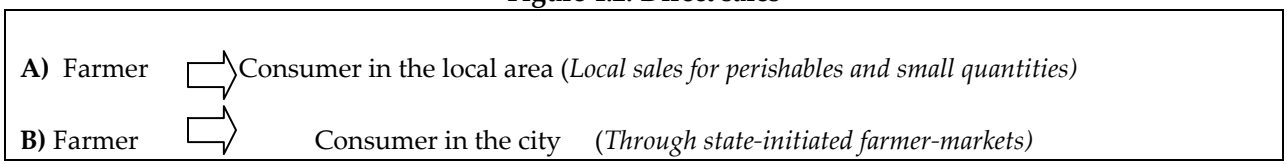
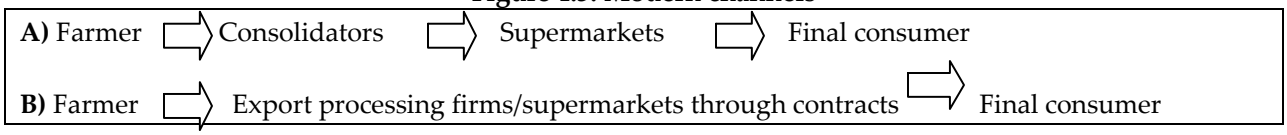


Figure 4.3: Modern channels



4.2 HOPCOMS' beginnings

Marketing of highly perishable commodities like fruit and vegetables has always been fraught with problems. Farmers often have little bargaining power, middlemen collect commissions from producers, there are frequent delays in payments, and produce is sold on the basis of volume, with prices being determined to the advantage of retailers and not the farmers.

In order to tackle these issues the Horticulture Producers Co-operative Marketing and Processing Society Limited (HOPCOMS) was founded in 1959 (under a different name) as a co-operative under the Indian Co-operative Societies Act.[11] Its members comprise farmers, state financial organizations and the Karnataka state government. It is managed by officials appointed by the state, drawn from the Department of Horticulture and the Department of Co-operation. As of 2007, there are 17 HOPCOMS in the state, each working independently within demarcated districts of operation.

Over the years, the society has undergone major structural changes (Table 2).
The aims and objectives of the society are:

- to ensure remunerative prices to producers of horticultural crops;
- to free both producers and consumers from the clutches of middlemen;
- to ensure quality supply of fruit and vegetables at reasonable prices to farmers;
- to expand marketing and cold storage facilities progressively for the benefit of farmers; and
- to promote horticultural development on scientific lines by providing inputs and necessary technical advice.

[11] For more details on HOPCOMS, see Rao (1987).

Table 4.1 Timeline of significant occurrences at HOPCOMS

Year	Significant occurrences
1959	Founded as Bangalore Grape Growers Cooperative Marketing & Processing Society Ltd
1965	Operation extended to cover all vegetables in the state
1983	Renamed as Bangalore Horticultural Producers Co-operative Marketing and Processing Society Ltd
1987	Renamed as HOPCOMS
1997	District-level HOPCOMS were spun-off as independent units
2006	Redefinition of administrative area: Bangalore HOPCOMS left with three districts (Bangalore Urban, Bangalore Rural and Kolar) as its area of operation and branches in the remaining districts handed to the respective Horticultural Societies.

4.3 HOPCOMS' growth

The society started with 507 farmer members and Rs. 1,269 share capital in 1959 (nominal terms). It expanded to 15,000 members in 2005, with a total paid up share capital of Rs. 258.54 lakhs.[12] The state government's stake in HOPCOMS' share capital steadily increased from 35 per cent in 1970-71 to 96 per cent in 1996-97 (Rao 1997). By March 2007, it had fallen to 228 lakhs (88 per cent of total share capital).[13]

By 1997, HOPCOMS had developed a network of procurement centres, godowns, retail outlets and input supply centres in eight districts of Karnataka. Of these, Bangalore was the largest and most important. Until 2006, the district level HOPCOMS had been functioning as one integrated entity, but in 2006 the organizational structure was decentralized into several independent units. Now Bangalore HOPCOMS covers three districts (Bangalore Urban, Bangalore Rural and Kolar) and the branches in the remaining districts have been handed over to the respective Horticultural Societies.

4.4 How HOPCOMS works: the other channel

A HOPCOMS unit obtains horticultural produce directly from the farmer against an indent (an informal preference is given to members).[14] This occurs through a network of decentralized collection centres. The procurement centres seek to concentrate many services to the farmer under one roof by providing outlets for buying inputs like manure, fertilizers (N, P, K), hybrid seeds, fungicides etc.[15] The price is announced for the day, and is typically a mark-up on the

[12] 1 US$ =40.9 Rs (August, 2007).

[13] Brief Note on HOPCOMS, HOPCOMS, (collected in March 2007).

[14] The preference seems to vary across procurement centres. Also, it seems to kick in when a commodity's supply outstrips demand.

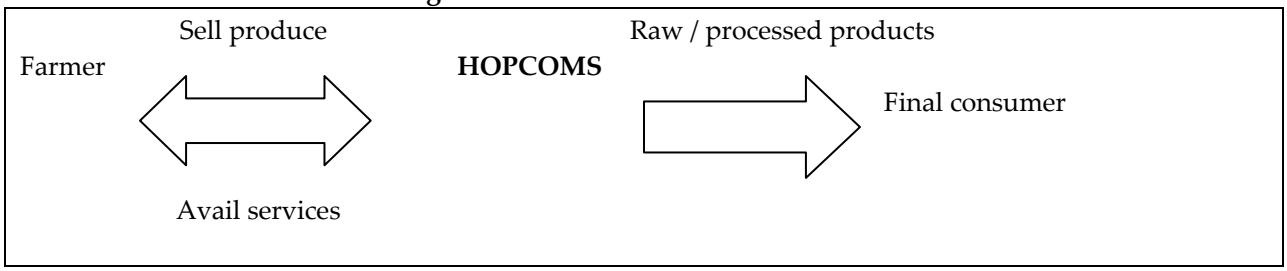
[15] In the case of Bangalore HOPCOMS, Lalbagh is the biggest procurement centre and accepts quantities ranging from 30-40 kgs to amounts as large as 750-900 kgs. The other procurement centres receive an average of 1-1.5 tonnes per day, with the accepted amounts varying from 20-30 kgs to 150-200 kgs.

price at relevant *mandis* where the price for the region is set. There is no formula or declared mark-up. Officials meet every morning in Bangalore and arrive at a price based on the prevailing prices that morning at four or five reference *mandis*. While this is likely to be higher than these prices, this is not a given.[16] Through low cost means and frugal infrastructure, HOPCOMS consolidates the produce in its central headquarters, channeling it into a network of its own retail outlets managed by employees.[17]

As part of its marketing strategy, HOPCOMS (both at Bangalore and Mysore) has sought to situate its outlets next to milk booths to enable consumers to pick up their daily necessities in one go. HOPCOMS retail outlets located at railway stations, bus stands and other prominent locations are another feature of its marketing strategy. The retail outlets operate between 10.30am and 8pm with a break in the afternoon and are staffed by two people, one of whom is a permanent employee of HOPCOMS and the other an assistant on a temporary payroll.

The retail price is a fixed mark-up on the procurement price, and is the same across the outlets. HOPCOMS is therefore the only intermediary between farmer and consumer (Figure 4.4). Theoretically, because the farmer is also a member of HOPCOMS, rather than being a pure intermediary HOPCOMS is more of a front-end aggregator and distributor for the farmer. According to the society, it pays 80 per cent of the price paid by the consumers to the farmers.[18] Apart from retailing, HOPCOMS also has juicing plants that bottle fresh fruit juice for sale.

Figure 4.4 HOPCOMS: The "other" channel



Essentially then, HOPCOMS attempts to combine the efficiency of vertical co-ordination with the empowerment of horizontal co-ordination

4.5 HOPCOMS' conceptual and theoretical foundation

To what degree can HOPCOMS be considered an innovation in the new retail context?
Current discussions about farmer organizations are invariably set within the new retail context of vertical coordination. Horizontal coordination is proposed as a way for farmers who are in the supply chain to corner a larger share of the efficiency gains from vertical co-ordination in

[16] Amounts are paid immediately; when the amount exceeds Rs 5,000 payments are made by cheque.
[17] According to Rao (1997) most of the outlets are owned by HOPCOMS and cost around Rs 1.25 lakh per unit to construct.
[18] Personal communication with the Procurement Manager, HOPCOMS Bangalore.

modern marketing channels Also, farmers' associations tend to be necessary but not sufficient—they are necessary because they reduce transactions costs, the single most important factor that constrains smallholders' participation in the modern retail sector. On the other hand, investment in management, institutions and infrastructure to comply with supermarket standards is essential to ensure continued participation of these farmers in retail supply chains.

However, vertical and horizontal co-ordination are usually regarded as militating against one another. Over-focusing on horizontal goals could undermine the benefits of vertical integration and leave fewer surpluses for sharing among the producers (Mules 1981, Treville 1986).

An institution like HOPCOMS seeks to achieve a harmonious combination of vertical and horizontal co-ordination, akin to a state-cum-farmer-owned company.[19] It is in this sense that we can think of HOPCOMS as innovative. It differs from simple marketing co-operatives in that it is also the retailer. It differs from other forms of disintermediation in the private sector by including farmers and bringing them together as owners of institutions rather than mere participants. It is not an innovation embedded in a new supply chain; rather it is an alternate competing supply chain of its own.

[19] Unlike Amul, however, which has many farmer organizations—one in each village—that elect representatives within a hierarchical structure, HOPCOMS functions like a farmer-owned company, without decentralized farmer associations.

5 Data and methods

We now describe our approach to exploring the degree to which HOPCOMS has been successful in achieving the difficult combination of horizontal and vertical co-ordination.

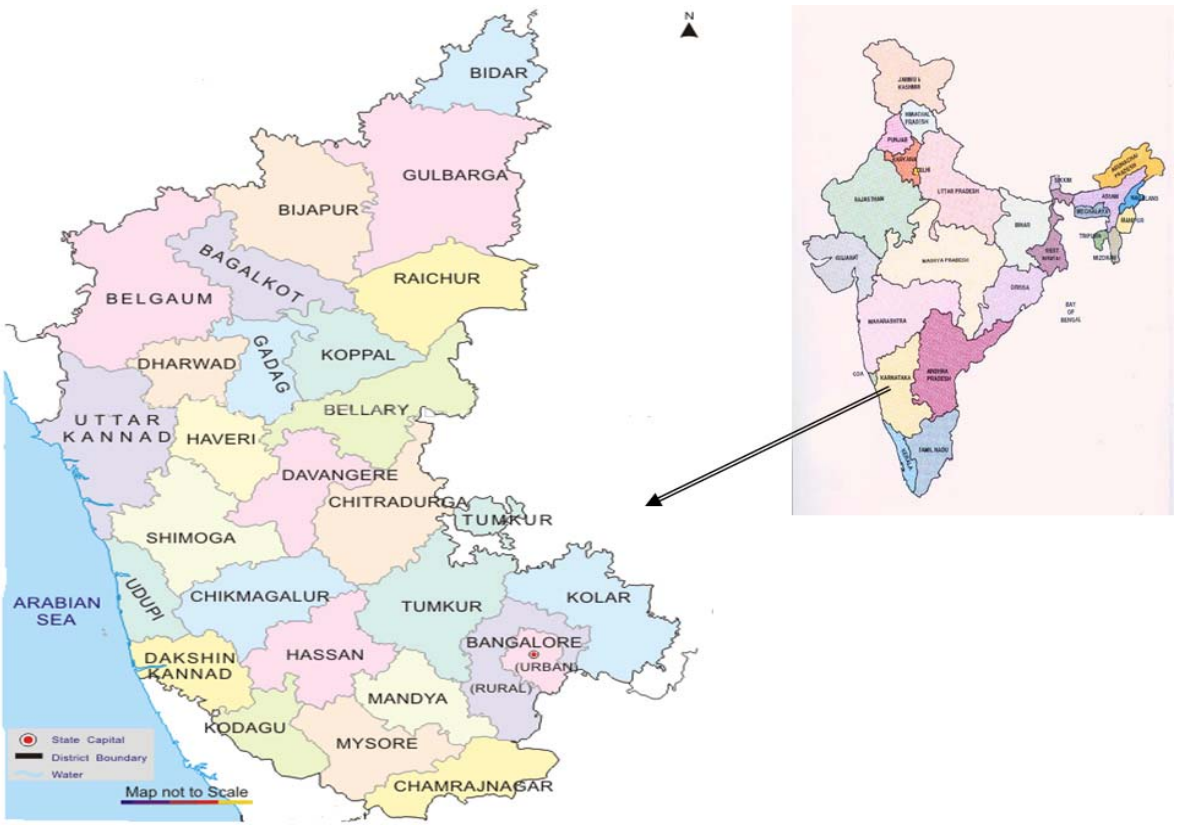
We developed a unique dataset of around 186 farmers spread across six districts around Bangalore and Mysore in the south of Karnataka State (Figure 1, and Appendix 1). These districts include Mysore, Chamarajanagar, Mandya, Bangalore Rural, Bangalore Urban and Kolar. The first three districts are under the jurisdiction of HOPCOMS (Mysore) and the latter three fall under HOPCOMS (Bangalore) (Table 5.1).

Table 5.1: Scope of the survey

	Districts covered	**HOPCOMS Centres**	**Mandis**
Mysore	Mysore Mandya Chamarajnagar	Mysore (Mysore)	RMC Market & Devaraj Urs (Mysore) Gundlupet (Chamarajnagar) K.R. Pet (Mandya)
Bangalore	Bangalore (Rural) Bangalore (Urban) Kola	Chennapatna (only for bananas) (Bangalore Rural) Sarjapura (Bangalore Rural) Hoskote (Bangalore, Rural) Lalbagh (Bangalore,Urban)	Chinthamani (Kolar) Yeshwanthpur K.R. Market Ramanagara

We selected farmers using choice-based sampling, as well as simultaneous selection of farmers who visited the wholesale *mandi* and the HOPCOMS collection centre. The days and dates for sampling farmers were selected so as to ensure that we covered different times during the day as well as different days of the week. Information was collected by five local investigators using structured questionnaires. These questionnaires were pre-tested and were developed after intensive field visits to the regions surveyed. Data were collected on various aspects of marketing of horticultural produce, including transactions costs associated with alternate channels. While the study mainly hinges on the survey, it also draws on insights from conversations with a wide range of supply chain actors.

Figure 5.1: Karnataka State and districts



In this paper we define a HOPCOMS farmer/user as one who used HOPCOMS to sell a crop on the day of sampling. A non-HOPCOMS farmer/user is one who used a channel other than HOPCOMS to sell a crop on the day of sampling. Thus, either the farmer or someone else on their behalf was present in the market to sell the crop. We therefore describe the HOPCOMS farmer as "included" and the non-HOPCOMS farmer as "excluded". Our choice of HOPCOMS' use, rather than membership, is justified because even non-members can use HOPCOMS.

We first mapped the socio-demographic and economic characteristics of HOPCOMS farmers in order to ascertain the type of farmer who transacts with HOPCOMS. We performed simple statistical tests of comparison between HOPCOMS user and non-user farmers to see if there are specific characteristics that distinguish these two groups in a substantive way.

We then mapped out the attributes of the different marketing channels to see how these relate to farmers' decisions. Our aim was to get some sense of the characteristics of "inclusion" and "exclusion" to see which features of HOPCOMS' institutional design promote smallholder participation.

Finally, we measured the benefits and costs to the farmer from HOPCOMS' inclusion (or exclusion).

6 Results: HOPCOMS in practice

HOPCOMS is innovative in three respects—as a vehicle for smallholders, as a vertical coordinator and as a co-operative. How does HOPCOMS fare in practice and what are the lessons it offers for sustainability, scaling up and replicability?

6.1 HOPCOMS as a vehicle for smallholders

The findings from our survey suggest that HOPCOMS is inclusive of smallholders in more ways than one. Firstly, the data in Table 6.1 show that 77 per cent of those who transact with HOPCOMS are marginal and small-scale farmers; only 1.1 per cent of HOPCOMS' users captured in our survey were large-scale farmers. This compares favourably with the average for the region (Southern Karnataka), which comprises 69 per cent small and marginal farmers. Thus, not only are small-scale farmers included in HOPCOMS, they are over-represented. HOPCOMS' farmers also trade significantly smaller quantities than their *mandi* counterparts.

Table 6.1: Smallholders in Southern Karnataka, in HOPCOMS and the *mandi*

	In Southern Karnataka %	HOPCOMS users in the survey	Non-HOPCOMS users in the survey
Marginal farmers (below 1 ha)	41.9	32.18	37.4
Small (1-2 ha)	27.3	44.83	34.34
Semi-medium & medium (3-10 ha)	28.9	21.84	22.22
Large (> 10 ha)	1.7	1.15	1.01
TOTAL	100%	100%	100%

Sources: Authors' survey; Indiastat (2006)

Secondly, HOPCOMS provides an additional marketing channel and hence expands the choice set available to smallholder farmers. The fact that the landholding class profile is similar between users of the *mandi* and HOPCOMS means that the *mandis* and HOPCOMS complement each other. In districts where are there no HOPCOMS procurement centres, farmers can only use the *mandi*. Our data on both HOPCOMS users and non users highlights that the marketing channels available to small-scale farmers are either the *mandi* or the HOPCOMS procurement centres, while it seems that the farmers with big landholdings or who are selling large quantities of produce may have opted or been selected to be part of the modern supply chains.

6.1.1 What are the drivers of inclusion?

In principle, HOPCOMS is designed to be inclusive, even empowering, of small and marginal farmers, although this is not an explicitly stated objective of the co-operative. We hypothesize

that the following elements of HOPCOMS' institutional design promote smallholder participation:

1. *Decentralized procurement:* this reduces transactions costs for farmers by reaching out to the farmers. For example, our data reveal that HOPCOMS' users travel a much smaller distance to sell their produce (Tables 4 and 7). Decentralized procurement means that HOPCOMS acts as a consolidator, helping scale-up the transactional size of smallholders.

2. An *indent system* that puts ceilings on quantities procured. This often provides a disincentive to large-scale farmers or those who transact large volumes at a time, so such farmers choose to opt out of the system.

3. *Fixed pre-announced price,* typically a weighted average or mark up of reference market prices. This has the potential to empower smallholders by obviating the need to negotiate a price. This might be particularly beneficial to those smallholders whose poor bargaining power means they face the lower end of the market price distribution.

4. *Membership* that offers a channel for representation and can redress power imbalances in marketing relationships. In fact, HOPCOMS even reserves 5 per cent of its farmer-memberships exclusively for women.

5. *Sales of inputs* such as seeds, fertilizer and pesticide, mean that HOPCOMS serves as a one-stop-shop for different needs. This improves smallholder access to inputs, as well as reducing input costs for the farmer through disintermediation in the input supply chain. This avoids mark-ups on input prices, which can be anywhere between 15-30 per cent when intermediaries are present.

6. Finally, HOPCOMS is *non-exclusionary*, in the sense that it also accepts produce from non-members and tenant-cultivators. The latter in particular is significant. Although HOPCOMS restricts memberships to landowners on the basis of documented evidence of ownership, tenant cultivators can still use HOPCOMS as a marketing channel.[20]

Together, these elements work on both the "set of incentives" facing the small farmer and their "capacities to respond to these incentives" (Berdegue *et al*. 2006).

While participation is an important aspect, the intensity of participation is equally instructive. Intensity of participation in this case is defined as the volume of crop sold to HOPCOMS (or *mandi*). This latter is difficult to capture since the farmers sell as many as 26 different crops. To measure trading volumes, we divided the percentage excess/shortfall by the commodity-group average. Of all the farmers who sell less than the average of a particular commodity, more sell

[20] Membership gives voting rights and preferential allocation of indents, although the latter is dealt with as an informal rule.

to HOPCOMS than at the *mandi*. Our results suggest that those trading smaller quantities participate in HOPCOMS.[21] Similarly, as much as 72 per cent of all HOPCOMS users sell lower than average quantities, while the figure for non-HOPCOMS users is 56 per cent. Across districts, non-HOPCOMS users sell greater quantities, on average, than their HOPCOMS counterparts and this difference is statistically significant. Part of this could be the result of the indent system that limits quantities sold by a farmer to HOPCOMS; no such limits exist in the *mandis*. These indent systems may however be providing strong disincentives to larger farmers to transact with HOPCOMS.

Apart from these, there are no statistically significant socio-demographic differences between HOPCOMS and non-HOPCOMS users (Table 6.2).

Table 6.2: Profile of HOPCOMS and non-HOPCOMS users

	HOPCOMS users	Non-HOPCOMS users	T-test for equality of means (assuming equal variance) or Z for equality of proportions
Average contribution of farm income to total income	86%	90%	1.09
Proportion who report that farming is NOT their only occupation	25.3%	23.2%	0.33
Proportion of women farmers in the sample	1.15	1.01	-
Average age	40	38.6	-0.86
Average experience (years)	18.9	19.9	0.595
Proportion who have completed school	26.3%	14.1%	-
Proportion who have NOT studied beyond primary school	27.6%	38.4%	-
Acreage of land cultivated	4.5	4.8	0.46
Average diversity (no. of crops per acre cultivated)	1.16	0.98	-0.88
The lowest diversity being:	0.14	0.1	
The highest diversity being:	13.3	9.4	
Proportion who are tenant cultivators	1.15	5.05	
Average distance to the market	27.19 kms	43.12 kms	2.18**

*means significant at 10%; ** significant at 5%, *** significant at 1%

[21] To the extent that larger quantities correspond to larger farmers, these results can be seen as a comment on smallholder participation. This would not be true if large-scale farmers harvest small quantities at any given time, relative to the small-scale farmers. There is no reason to believe that the latter may be the case.

6.1.2 Costs and benefits of inclusion: financial and non-financial

The notion of benefits and costs is important to define. Econometric studies attempting to gauge the impact of participation on incomes tend to focus more on the question of *whether* participation increases incomes rather than by *how much* participation increases income. Further, the qualitative dimensions of costs and benefits often take a backseat. Other case studies tend to highlight non-financial benefits, choosing not to measure financial benefits rigorously.

The assessment of costs and benefit of participation in HOPCOMS is rendered difficult by the organization's flexibility over who is included and excluded. Because farmers can flow in and out of the system by choice, the revealed preference approach would suggest that both the users and non-users of HOPCOMS would record positive benefits associated with their choices. To assess the extent of financial costs and benefits, we compute the difference between the day's sales revenue for a farmer from his/her market channel of choice (HOPCOMS or *mandi*) and the revenue he/she would have obtained had they opted for the other (*mandi* or HOPCOMS). We were able to do this for a subset of 50 farmers who provided us with detailed marketing costs and prices for the other channel that they had not chosen.[22] Thus while the results may not be robust, they are illustrative (Table 6.3).

Table 6.3: Financial benefits and costs of farmers' marketing choices

	Mean additional income from using HOPCOMS	Mean ratio of transaction costs to revenue in HOPCOMS and mandi	Mean ratio of travel costs to revenue to HOPCOMS and mandi
Those non-HOPCOMS farmers who would gain by switching to HOPCOMS (n=14)	37.7%	0.66	0.91
Those non-HOPCOMS farmers who would lose by switching to HOPCOMS (n=12)	-33.03%	0.42	1.06
Those HOPCOMS farmers who have lost by choosing HOPCOMS (n=5)	-33.2%	0.43	0.14
Those HOPCOMS farmers who have gained from their choice of HOPCOMS (n=29)	42.61%	0.42	0.45

Source: Authors' Survey

[22] The costs that are included are travel costs to market, packing, loading, unloading, packing material, market fees and payment for procuring market information. As the transactions cost does not include commission, which is around 8-15% in the *mandi* and 0% in HOPCOMS, these benefits are a conservative estimate.

The results reveal that over half the non-HOPCOMS users would have benefited financially had they chosen to use HOPCOMS. The mean percentage by which their income would have increased is 37 per cent. Only for less than half of them would such a switch have reduced their revenue from sales by around 33 per cent.

For the HOPCOMS users, more than four-fifths of those who responded would have *lost* 43 per cent of their revenue on average if had they gone to the *mandi* rather than HOPCOMS. The remaining one-fifth might have gained on average about 33 per cent more in income by going to the *mandi* rather than HOPCOMS. One of the important benefits of inclusion was that the transaction costs were lower in HOPCOMS. The ratio of transaction cost to revenue is 0.45 for HOPCOMS users and 0.72 for non HOPCOMS users (Table 6.4).

Table 6.4: Some costs and benefits for HOPCOMS and non-HOPCOMS users

Details	HOPCOMS users	Non-HOPCOMS users	Test of equality of mean or proportion
Proportion who felt that the price they got was "fair"	92%	78%	-2.6***
Average transaction cost per unit of cultivated land[a]	Rs. 319.8	Rs. 596.1	1.55**
Average commission paid	0	9.4% (65% say 10%)	-
Ratio of transactions cost to revenue from this sale	0.45	0.72	2.58***
Proportion who reported making a profit on the chosen crop this season	60.9%	49.5%	-1.56**
• Average profit per acre earned this season	(+)Rs.1308	(+)Rs.1071	-0.55
• Average loss per acre for those who suffered losses	(-)Rs.1525	(-)Rs. 2760	-0.6
Proportion who reported being in debt this season	50.6%	66.7%	2.22**
• Average amount of debt per acre cultivated for those who report debts	Rs.10722	Rs. 5718	-1.275

[a]These have not been computed per unit of commodity sold, since there are many commodities.
1 US $=40.9 Rs. (August 2007)
*means significant at 10%; ** significant at 5%, *** significant at 1%
Source: Authors' Survey

About 64 per cent of non-HOPCOMS' users were aware of the price in that particular market before deciding to sell in it. In comparison, only 35.6 per cent of HOPCOMS' users were aware of the price (Table 7). This probably stems from the fact that quantity and quality of produce permitting, HOPCOMS was always their first choice as they were assured of prices equal to if not more than what the market offered them. This conveys the sense of security that comes

along with inclusion, which is a rare and precious commodity in agricultural marketing, especially in the Indian context.

Table 6.5 The nature of transactions

Details	HOPCOMS' users	Non-HOPCOMS' users	Z-stat/t-test
Proportion who are aware of the price in the market before they sell	35.6%	64.4%	2.30**
Proportion who felt that weighing was unfair on that day	8%	4%	1.1535
Proportion who think weighing, in general, is unfair ("sometimes unfair" or "always unfair")	34.5%	43.4%	1.7*
Proportion who felt that grading was unfair on that day[23]	10.34%	6.06%	1.0
Proportion who think quality grading is unfair (sometimes unfair or always unfair)	46%	54.5%	1.92*
Average time spent on travel to market, and preparing for sale	320 minutes	597 minutes	4.9***
the above, excluding travel time	188 minutes	322 minutes	3.8***
Average transaction time	2 hours	3 hrs 20 mins	2.34**
Maximum	4 hours	1 day (8 hours)	
Minimum	10 mins	30 mins	

*means significant at 10%; ** significant at 5%, *** significant at 1%
Source: Authors' Survey

There are other indicators that suggest that HOPCOMS benefits those who are included. When compared with non-HOPCOMS users, a significantly higher proportion of HOPCOMS users reported making profits and thought the price was fair (Table 6.5). They had significantly lower transactions costs per acre of land cultivated and significantly lower transactions cost-revenue (from this sale) ratios.

The question remains as to why farmers who stood to gain did not take advantage of the benefits of the alternate market? This is relevant since the farmers themselves report these potential gains. For the HOPCOMS users who might have gained monetarily by switching to the *mandi*, it is interesting that their travel time to the HOPCOMS collection centre is just 14 per cent of the travel time to the *mandi*. The transaction time in the HOPCOMS collection centre is shorter as well. So, non-financial benefits such as these might compensate for the financial gains to be made from switching. For the non-HOPCOMS users who do not switch from the *mandi* despite the non-financial advantages of transacting with HOPCOMS, the answers lie elsewhere. Our field interviews suggest that there are two major hurdles to participating in HOPCOMS:

1. The indent system that restricts quantities.

[23] Unfair is distinct from malpractice.

2. Quality controls. HOPCOMS accepts only better quality produce and although the assessment of quality is done visually, this poses a big problem for the smaller farmers who feel they have no control over quality on-farm.

6.2 HOPCOMS as a vertical coordinator

In theory, HOPCOMS' vertical co-ordination could bring disintermediation efficiencies by providing free crop advice to farmers and selling inputs at lower prices than the market rate. Table 6.6 shows that many farmers do use HOPCOMS' technical services when available. Many farmers participating in the survey mentioned that they would like advice on crop choices and agronomic practices. In India, where public agricultural extension services are not very efficient, HOPCOMS could act as an alternative provider with a special focus on horticulture. Besides, its plans to start up juicing plants will add value to farmers' products, with benefits to both producers and consumers. The turnaround of Mysore HOPCOMS from a loss-making to a profit-making entity was partly due to revenue from the sale of fresh juice.

Table 6.6: Transactions in HOPCOMS

Details	Value
Proportion who use HOPCOMS only as a marketing channel	48%
Proportion who use HOPCOMS' other services:	
Use yard to sell	26%
Buy seeds	24%
Buy fertilizer/manure	22%
Buy pesticide/insecticide	23%
Proportion who had sold against an indent that day	50.57%
Proportion of these who sold more than the indent	13.8%
Proportion who feel that the process of allocating indents is generally unfair ("Sometimes unfair" or "always unfair")	25.27%
Proportion of the produce that was rejected that day	4.39%
- minimum	0
- maximum	66
What is typically done with rejected produce?	
Sell it elsewhere at a lower rate	77.14%
Leave it behind or throw it away	11.43%
HOPCOMS discards it	11.43%

Source: Authors' Survey

Table 6.7: Perception of HOPCOMS by users

Details	Value
Proportion of HOPCOMS' users who say HOPCOMS has no disadvantages	50%
Proportion who are "satisfied" or "very satisfied" with HOPCOMS	72.41%
Proportion who are "dissatisfied" or "very dissatisfied"	6.9%
The top 5 primary disadvantages of HOPCOMS (as a proportion of those who report disadvantages)	
Quantity limits	17.5%
Quality standards	11.25%
Weighing and lack of electronic weighing machine	6.25%
Not all crops are accepted and large-scale farmers treated better	2.5%
MEMBERSHIP AND OWNERSHIP	
Proportion of HOPCOMS' users who are members	50.57%
Proportion of non-member users who would like to be members	72.09%
Proportion of the members who have ever voted	87.23%
- the year of the most recent election mentioned by a farmer in the sample	2004-05
Proportion who have ever held any elected position	0
Proportion who feel they have participated in decision-making	46%
- the proportion of these who said they did this by attending meetings	49%
The most important reason farmers don't participate in decision-making	No time to attend meetings

Source: Authors' Survey

However, in practice HOPCOMS fails to use its potential efficiently. Its half-hearted entry into processing and discontinuation of crop advice services to farmers in many centres indicate inefficiency in day to day operations. At this time of change, HOPCOMS could capitalize better on its backward and forward linkages and could be more attractive to farmers without much investment in market promotion. Strong management with a clear vision for the future could bring efficiency and success to the organization.

6.3 HOPCOMS as a co-operative

While theoretically, co-operatives or horizontal farmer arrangements can empower smallholder members, they can face some problems. HOPCOMS' most important drawback is that it is not a true co-operative because decision-making is not bottom-up (Table 9). While a reasonably high percentage of HOPCOMS' users were members who said that they participated in decision-making, this was restricted to voting in elections. At best, the ownership gives farmers, especially smallholders, a sense that they get "good respect". This is valuable in itself, but not enough. There is hence little incentive to be a member. Of the sampled HOPCOMS farmers, only over half were members.

One of the reasons is that rather than being a decentralized farmers' organization, HOPCOMS functions like a farmer-owned company in which the farmers are minor shareholders. This is in

contrast to Amul, for instance, whose ethos is decentralized, bottom-up decision-making, thereby promoting the sense that farmers are the real owners of the co-operative. This has contributed to Amul's resounding success.

As has been pointed out earlier (Rao 1997), there is no awareness of or participation among members on issues like expanding the society's area of operation, improving the sales network, computerization, and product diversification, etc. Users view the organization more as a government department. There is no training in the meaning of co-operation, or capacity-building for members to assume leadership roles. However, if the society is to become sustainable and to scale-up, these aspects will be vital.

Another issue is that of power within the co-operative. Where there is inequality among the members, the wealthier farmers may enjoy disproportionate power or expropriate the surplus. In other words, there is an inverse relationship between heterogeneity and efficiency (Hart and Moore 1998). In HOPCOMS, this is not conspicuous, although many farmers complained of differential treatment, saying bigger farmers tend to be treated better (Table 6.7). It is also a well-known fact that many prominent politicians with farming backgrounds are members of HOPCOMS. So while the connection between political power and HOPCOMS membership is not clear, a link is a definite possibility.

7 Implications for sustainability, scaling-up and replication

7.1 Sustainability

In any public policy intervention, the issue of sustainability is a big question. How dependent is it on subsidies doled out by the state? In HOPCOMS' case, the subsidies have so far been for investments in infrastructure, rather than for day-to-day operations. For example, HOPCOMS received grants totalling Rs 2.2 crores from various sources.[24] However, another source of implicit support for HOPCOMS is its assured demand from larger public sector institutional buyers and from the health-conscious emerging middle class who prefer high value foods like fruit and vegetables. The third source of subsidy is the state, which supplies HOPCOMS with premises free of charge, both for the procurement centres and for the retail kiosks.[25]

The sustainability of smallholder inclusion would not be under threat. With HOPCOMS' frugal supply chain infrastructure (supported by the government) and decentralized procurement functions, incorporating small-scale farmers makes economic sense. While it is a profit-making entity, its goals are more to maximize social welfare than to maximize its profits. The backward and forward linkages within HOPCOMS enable it to share the profits among its users, mainly by increasing farmers' share in the retail price.[26]

[24] Such as the Dept of Horticulture, Govt. of Karnataka; National Horticulture Board, APMC, NCDC, Zilla Parishads of Bangalore, Mysore, Kolar and the Bangalore City Corporation.
[25] It is difficult to get precise estimates for these, since the documents are not publicly available.
[26] HOPCOMS' fruit stalls and juice centres sell products at market rates; however, they attract consumers

In the face of hefty retail competition, however, its sustainability as a profit-making entity is not assured. There are three paths it could choose:

1. It could invest in retail formats and build a new parallel supply chain. This might be the best option from the point of view of smallholder inclusion. But this would also demand significant changes in the organization and mode of functioning of this essentially government-centric entity. It would also require financial capital to develop competitive supply chain management infrastructure.[27] This would be the "other" revolution and like Safal, it could combine the efficiency gains from horizontal and vertical co-ordination. Given the current situation, this seems far-fetched, although not inconceivable.

2. The second-best option would then be to pursue aggressive marketing strategies through other methods like supplying fruit and vegetables to existing supermarket chains, franchisee arrangements etc. HOPCOMS would then have bargaining power due to its size. It would also be able to increase the volume of fruit and vegetables sold without having to invest in its own retail formats. This is more in line with the role popularly envisaged for farmer organizations in the new retail context. However, this will need intensive negotiations and a trustworthy partner to avoid risks such as unexpected lowering of prices by the supermarket chains, which could push HOPCOMS out of the supply chain, leaving smallholders in a more vulnerable position than before. This also raises the question of implicitly subsidizing private supermarkets with public money, an issue opposed by many farmer members and politicians in the country.

3. The third option—business as usual—might work, given the robust demand and stable clientele, but this would have limited welfare implications for the smallholder.

7.2 Scaling-up

With agrifood retailing set to increase by leaps and bounds in the coming years, the issue of scaling-up is interesting. Some observers suggest that HOPCOMS has missed an opportunity to scale-up, and could have become a "monopoly" in horticultural retailing in the state had there been greater vision and action.[28]

What has been holding it back? According to officials connected with HOPCOMS (in both Bangalore and Mysore), any increased procurement needs to be sold, so they procure only what can be sold through their retail outlets and through institutional sales. HOPCOMS has not made active efforts to expand its operating space. It appears that being cautious about a funneling

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because of their high quality products. This gives them more leverage in passing on benefits to farmers.

[27] In fact, this was talked about in the early years of this decade, but plans have not materialized.

[28] HOPCOMS accounts for around 6-10% of horticulture trade in Bangalore. It has therefore had a "disciplining role", but never "control", over the market, according to one official. It has maintained this share steadily since the early 1990s.

effect in its supply chain; HOPCOMS has refrained from expanding the supply pipeline itself. Since HOPCOMS is not interested in maximizing its profits, it has financial constraints to opening more procurement centres and retail outlets.

One of the issues debated is the decision in 1997 to spin-off district-level HOPCOMS units into independent entities. At a time when HOPCOMS could have attained scale through spatial integration, decentralization had the effect of confining the operations of individual units to particular geographic regions. This has also had implications for supply-demand management. Whereas this was easy within an integrated unit, it is now less flexible, since it now takes the form of inter-HOPCOMS trade.

Some other constraints to scaling-up are due to legal issues.[29] However institutional issues also play a large role in this. Some of these relate to the fact that as the government is the largest contributor to HOPCOMS' share capital, it is run as an appendage of the government and as a "government co-operative". This manifests itself in the organizational structure, with the top brass are seconded from the Departments of Co-operation or Horticulture for short tenures. Thus HOPCOMS lacks both a long-term vision and strategy.[30] In fact, HOPCOMS' tragedy, as some see it, is that at any point in time, it is only as good as the person who leads it.

7.3 Replicability

Given the current situation facing Indian farmers, the HOPCOMS model provides exciting opportunities for replication. In particular, it offers an example of an institution that attempts to provide marketing support to the small farmer through a combination of horizontal and vertical co-ordination. HOPCOMS' replicability derives from the fact that the preconditions for success are minimal and not peculiar or unique to the region it operates in. Clearly, necessary preconditions include suitable agro-climatic conditions for horticulture; the existence of demand for horticultural produce; government support for initial investments such as building procurement centres, retail outlets and cold-storage; and supportive government policies. In fact, a strong state would be an asset and is critical for effective replication. Without this an institution like HOPCOMS might languish, unless there is initiative and a culture of co-operation amongst the farmers. Beyond these, there is little asset-specificity and no particular investment that farmers need to make. In fact, recognizing the potential of HOPCOMS-like institutions, variants of the HOPCOMS model have been initiated in the neighbouring states of Kerala and Tamil Nadu.[31]

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[29] The huge HOPCOMS procurement yard in Bangalore is in the midst of ownership litigation so upgrading this largest centre is not possible.

[30] However, there were cases where bureaucrats, even on a short tenure at HOPCOMS, were able to impart vision. Dodda Kende Gowda, Managing Director at Mysore HOPCOMS in early 2007, is one example. He has achieved a turnaround, generating profits for the first time in many years because of aggressive marketing. Chennapa Gowda, seen as the architect of HOPCOMS' success, is another bureaucrat who set up systems in HOPCOMS.

[31] However we have not explored the degree of success that they have achieved.

It is also possible to contrast the performance of HOPCOMS (Mysore), a loss-making entity, with HOPCOMS (Bangalore), which is profitable. We attempted to identify the underlying causes of their different performance, although we were hampered by contextual constraints. When Mysore HOPCOMS was spun-off from the main Bangalore HOPCOMS, it inherited liabilities that have been difficult to meet. The turnaround has also been challenging because of the large permanent staff on its books which are surplus to requirements. Mysore's scale of operation is also about one-tenth that of Bangalore. For example, Bangalore has four procurement centres and 318 retail outlets compared to Mysore's one procurement centre and 40 retail outlets. The general opinion is that with scaling up, Mysore HOPCOMS could well replicate the success of Bangalore, and indeed it has begun to do just that.

8 Concluding remarks

As an institutional innovation that combines horizontal and vertical co-ordination, HOPCOMS holds great theoretical promise as a platform for smallholders to connect to dynamic markets. Yet, in practice, it does well in some aspects but not in others.

HOPCOMS' main strength is its vertical co-ordination. Through low cost means, it is able to procure farmers' produce and get it to consumers through a network of decentralized procurement centres and scattered retail outlets.

But HOPCOMS' role in relation to the small farmer has to expand. For example, HOPCOMS could provide crop advisory services to farmers, such as when to grow what crop, in line with marketing inputs and market intelligence. Though this was an original objective of the society, it has got diluted over time and now is non-existent. One thing we noticed during our study was that HOPCOMS has made very little effort to study the profile of those who use its services. There is a lack of data on even such basic issues as what percentage of small-scale farmers use its services. Thus, meetings with members may be a good forum to assess their needs and stock inputs.

HOPCOMS' procurement centres are visited almost daily by farmers in large numbers. These could be an ideal location for providing agricultural inputs and extension services by the agricultural universities. Though some procurement centres, notably Chennapatna, Lalbagh and Hoskote, have facilities for selling fertilizers and inputs, the uptake is very limited. The ideal situation would be for HOPCOMS to be a one-stop-shop for all the requirements of the farmer. Given the rather high level of indebtedness among the sample of farmers we studied, linking to a financial organization by at least providing its premises for setting up banking operations could also benefit farmers.[32] Improving vertical linkages such as providing credit, inputs and crop-planning advice, a bottom-up approach in its operations combined with

[32] Rao (1997), in his survey of HOPCOMS farmers, mentions that farmers themselves were in favour of linking credit with marketing.

horizontal co-ordination could all allow HOPCOMS to become the innovation it truly ought to be.

For this, however, there is universal agreement that the organization needs professional management with a long-term vision. It would have to be guided by the principle that the government only manages the collective, and that the real owners are the farmers. Yet HOPCOMS is currently run as an extension of any government department, as a static organization which does not function as a change agent should. If it continues at this rate, it could well be assigned to oblivion by the aggressive marketing practices of the retailers. The losers would be the small-scale farmers.

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10 Appendix 1: Maps of HOPCOMS and wholesale market sampling sites

Figure A1. Sampling sites under Bangalore HOPCOMS

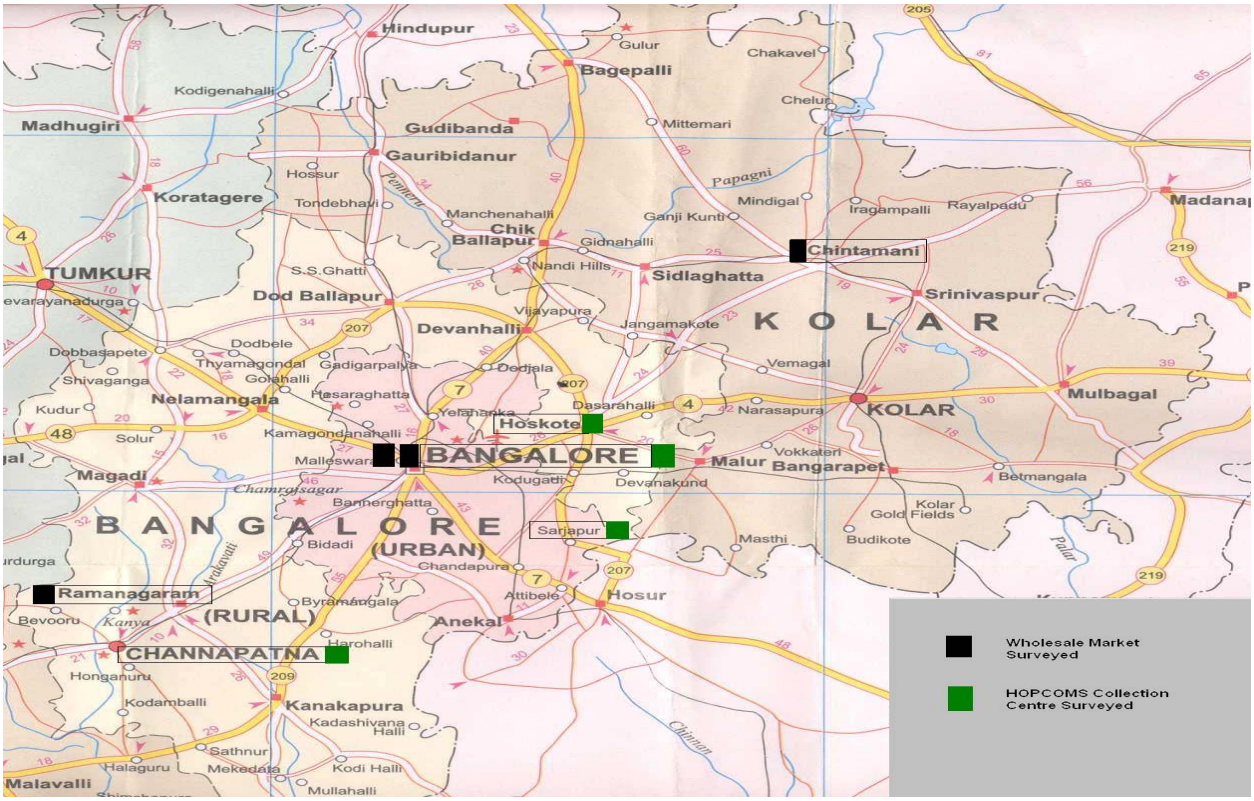
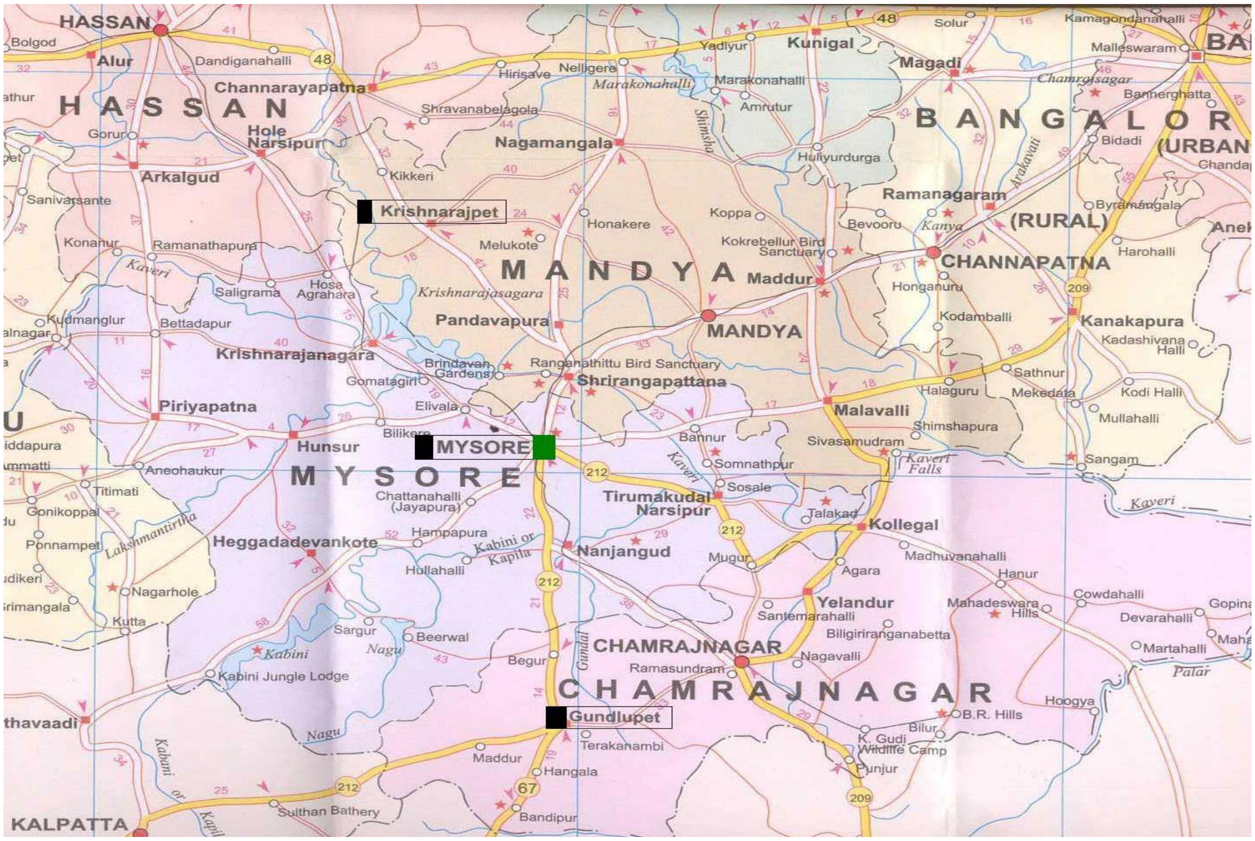


Figure A2. Sampling sites under Mysore HOPCOMS



Regoverning Markets

Regoverning Markets is a multi-partner collaborative research programme analysing the growing concentration in the processing and retail sectors of national and regional agrifood systems and its impacts on rural livelihoods and communities in middle- and low-income countries. The aim of the programme is to provide strategic advice and guidance to the public sector, agrifood chain actors, civil society organizations and development agencies on approaches that can anticipate and manage the impacts of the dynamic changes in local and regional markets. The programme is funded by the UK Department for International Development (DFID), the International Development Research Centre (IDRC), ICCO, Cordaid, the Canadian International Development Agency (CIDA), and the US Agency for International Development (USAID).

Innovative Practice

Innovative Practice is a series of case studies from the Regoverning Markets programme providing examples of specific innovation in connecting small-scale producers with dynamic markets at local or regional level. Based on significant fieldwork activities, the studies focus on four drivers of innovation: public policy principles, private business models, collective action strategies by small-scale farmers, and intervention strategies and methods of development agencies. The studies highlight policy lessons and suggest working methods to guide public and private actors.

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