



Saurashtra and Vidarbha were pretty much at the same level of agrarian stagnation until 1990, and for similar reasons. Since then, while Vidarbha agriculture continued to stagnate, Saurashtra agriculture broke ranks and began growing, especially after 2000, at accelerated pace. This Highlight explores why.

We argue that, besides a succession of good monsoons, astute and pragmatic governance of Gujarat's agricultural economy especially during the recent years goes to explain Saurashtra's high growth performance. In contrast, populist policies, accent on public investment in canal irrigation and 'special packages' have failed Vidarbha because these addressed symptoms rather than causes of agrarian stagnation.

To give Vidarbha agriculture a shot in the arm, Maharashtra should, among other things: [a] invite, even incentivize, Amul and Mother Dairy to compete for milk procurement, processing and marketing in rural Vidarbha; [b] promote irrigated Bt cotton as an annual crop in place of Bt cotton as a rainfed, *kharif* crop; [c] rework farm power supply policies to provide rationed but reliable and quality farm power supply; and [d] shift water policy focus from large irrigation projects to decentralized groundwater recharge.

Water Policy Research

HIGHLIGHT

Agricultural Growth and Rural Dynamism

Why is Saurashtra Firing on All Cylinders While Vidarbha is Limping Along?

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AGRICULTURAL GROWTH AND RURAL DYNAMISM: WHY IS SAURASHTRA FIRING ON ALL CYLINDERS WHILE VIDARBHA IS LIMPING ALONG?¹

Research Highlight based on Shah et al. 2012.²

BACKDROP

Understanding the causes of agrarian stagnation in Vidarbha region of Maharashtra has been a source of endless charm and frustration for researchers and policy makers in India. Increasing incidence of farmer suicides in Vidarbha has heightened the urgency of improving the conditions of farmers and farming in the region. The Prime Minister's 2008 Rehabilitation Package, which proved little more than a dole, has failed to make any major impact on Vidarbha agriculture. This has made it important to reflect again on what ails Vidarbha agriculture and how to jumpstart its accelerated growth.

In a series of studies supported by the ITP, Sanjiv Phansalkar (2003) and others explored various theories - not mutually exclusive - that have been offered at different times to explain the failure of Vidarbha to jumpstart rapid agricultural modernization and growth. All together, six 'growth depressants' have been invoked to explain the continuing agrarian impasse in Vidarbha: [i] history of *Zamindari* tenure during colonial rule bred a feudal culture while *Ryotwari* tenure encouraged progressive, outward looking ethos in Western Maharashtra and Konkan; [ii] partly as a result, economic institutions such as farmer co-operatives failed to develop in Vidarbha as they did in Western Maharashtra; [iii] unlike Western Maharashtra's social structure dominated by enterprising *Maratha* and *Brahmin* communities, rural Vidarbha has a divisive social structure with dissensions among *Marathas*, *Marwaris* and Scheduled Castes and Tribes; [iv] failure of Vidarbha to throw up a single political leader of note has left it orphaned in the political economy of Maharashtra; [v] the Western-Maharashtra dominated state politics kept paying lip service to the cause of Vidarbha but systematically diverted resources away from it leaving behind a huge 'development backlog'; and [vi] Vidarbha is a harsh terrain for modern agriculture, with its black cotton soil that inhibits

percolation of rainwater and its hard rock aquifers with little storage that restrict scope for large scale groundwater irrigation.

SAURASHTRA: GUJARAT'S VIDARBHA?

Saurashtra region of Gujarat has marked similarities with Vidarbha in several respects, including the same six 'growth-depressants' invoked to explain Vidarbha's agrarian stagnation. Until Independence, Saurashtra was fragmented into tiny princely states ruled by princelings infamous for their extravagance and waywardness, while the rest of Gujarat enjoyed progressive rule by the Gaikwads as well as the British. It had worse form of *Zamindari* than Vidarbha. Its social structure is more fractious with shifting power equations between *Patidar Kanbis*, *Kshatriyas*, *Kolis* and Scheduled Castes. As a result, Saurashtra remained a sterile ground for progressive institutions. Dairy, sugar, cotton, and even tube well cooperatives took strong root in Central, South and even North Gujarat, but Saurashtra remained inhospitable to cooperatives of any kind. For decades until Keshubhai Patel became the Chief Minister of Gujarat, Saurashtra too was lightweight in Gujarat's political economy. In concentration of public irrigation systems, the relationship between South-Central Gujarat and Saurashtra is even more tilted against Saurashtra than that between Western-Maharashtra and Vidarbha is tilted against Vidarbha. Tall promises of irrigating Saurashtra's parched fields with Narmada waters have remained empty promises. Like Vidarbha, much of Saurashtra is also underlain by hard rock aquifers with limited storage. Saurashtra's inverted-saucer shaped topography makes monsoon rain runoff at great speed into the Arabian ocean, leaving the landscape dry, even parched, soon after the monsoon withdraws. Finally, unlike Vidarbha's relatively stable and higher rainfall, Saurashtra frequently suffers from early withdrawal of monsoon, making even *kharif* crop insecure.

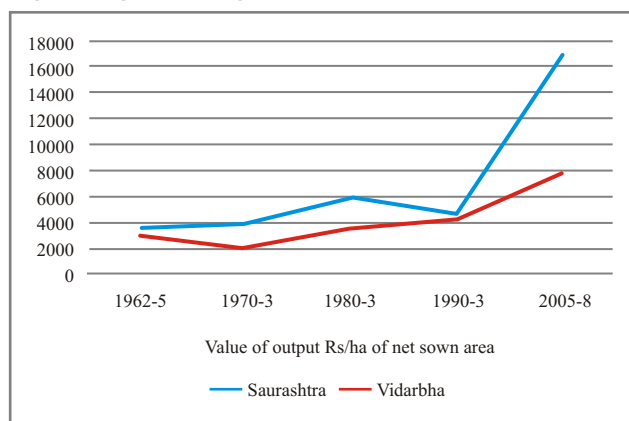
¹This IWMI-Tata Highlight is based on research carried out under the IWMI-Tata Program (ITP). It is not externally peer-reviewed and the views expressed are of the authors alone and not of ITP or its funding partners - IWMI, Colombo and Sir Ratan Tata Trust (SRTT), Mumbai.

²This paper is available on request from p.reghu@cgiar.org

ACCELERATED AGRICULTURAL GROWTH IN SAURASHTRA AFTER 1990

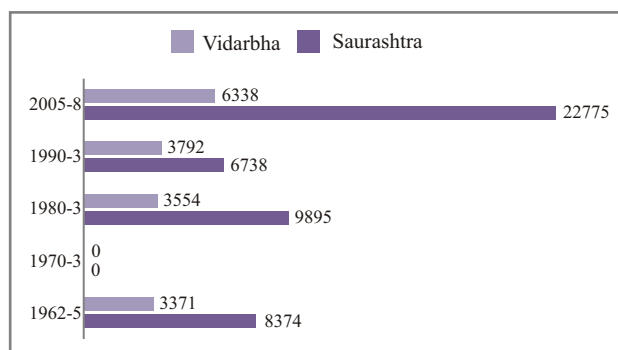
These six 'growth depressants' kept agrarian economies of Saurashtra as well as Vidarbha on a low performance trajectory. However, around the early 1990's, Saurashtra broke ranks with Vidarbha in agricultural growth. And since 2002, Saurashtra's agricultural growth has been accelerating at an accelerated pace. Bhalla and Singh's (2012) seminal study of district-wise growth performance over five trienniums since 1962-65 upto 2005-08 is one indication. Figure 1 summarizes the trends in the growth of gross value of output of agriculture (GVOA at 1990-93 prices) per hectare of net sown area over this 40 year period. During 1990-93, the GVOA per hectare of net sown area for Saurashtra and Vidarbha were nearly equal. But by 2005-08, Saurashtra's GVOA was over twice that of Vidarbha. Figure 2, based on Bhalla and Singh's data, shows that worker productivity in Saurashtra has done even better; and this provides a better indicator of impact of agricultural growth on farm incomes and livelihoods. Much indicative evidence suggests that the gulf between the two regions has only widened further since 2008.

Figure 1 Agricultural growth in Saurashtra and Vidarbha



Source: Bhalla and Singh (2012) for data up to 2005-08.

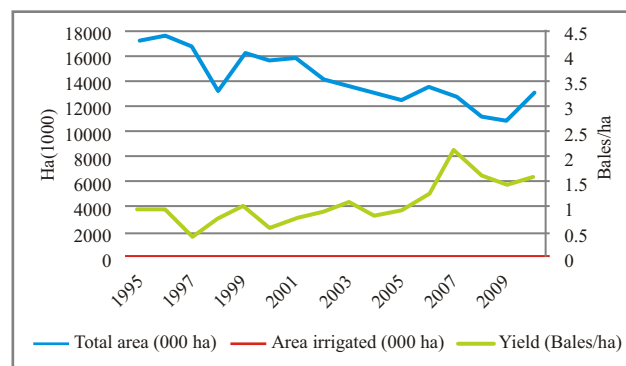
Figure 2 Labor productivity of agriculture in Saurashtra and Vidarbha



Source: Bhalla and Singh (2012)

Cotton, which has been Vidarbha's traditional stronghold, has become its nemesis. Phansalkar (2003) argues that, even after the arrival of Bt cotton, the success of rainfed cotton to produce low but reliable yield has kept irrigation demand for cotton low in Vidarbha. Irrigated cotton area is less than 1 percent of Vidarbha's cotton area. Thanks to rapid adoption of Bt cotton, rainfed cotton yield has been slowly improving. However, in a period of global boom in cotton demand and India's emergence as a major cotton exporter, Vidarbha has shed its cotton area from 17 lakh³

Figure 3 Vidarbha: Area, Irrigated Area and Yield/ha of cotton

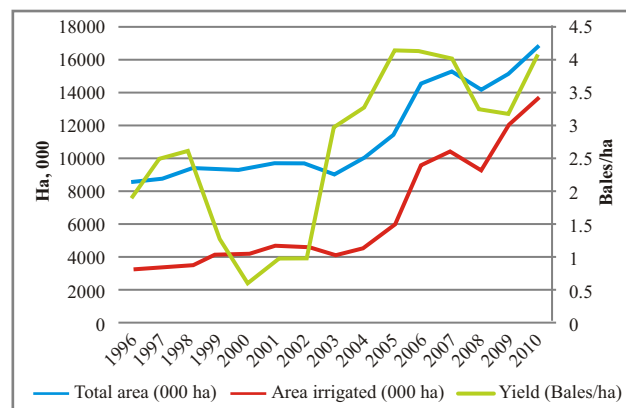


Source: Season and Crop Reports, Commissioner of Agriculture, Maharashtra and Directorate of Economics and Statistics, Ministry of Agriculture, Government of India

ha around 1995 to around 11 lakh ha in 2009, with rainfed cotton making way for rainfed soybean (see Figure 3).

In contrast, cotton has worked wonders for Saurashtra agriculture. In 1996, Saurashtra's 8 lakh ha of cotton area was less than half of Vidarbha's. And like Vidarbha, Saurashtra's cotton crop too was mostly rainfed. In 2010, the positions were nearly reversed. More significantly, adoption of Bt cotton in Saurashtra was closely followed by conversion of rainfed cotton to irrigated cotton.

Figure 4 Saurashtra area, irrigated area and yield/ha of cotton

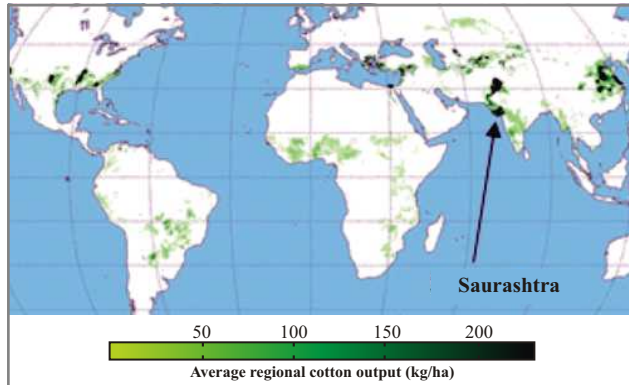


Source: Department of Agriculture, Krishi Bhavan, Government of Gujarat, Gandhinagar.

³One lakh = 0.1 million

Irrigated cotton area in Saurashtra increased from around 3.5 lakh ha in 1996 (some 40 percent of total cotton area) to 14 lakh ha (over 80 percent of total cotton area) (Figure 4). This had a dramatic impact on cotton yield, which more than doubled over the past 15 years and is now amongst the highest in the world (Figure 5). Saurashtra cotton also fetches premium prices in international markets.

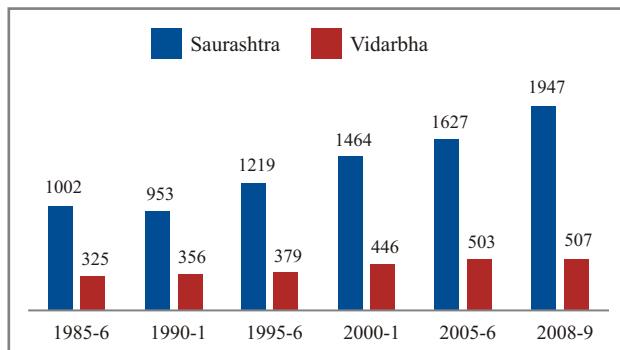
Figure 5 Cotton yield around the world (kg/ha)



Source: <http://upload.wikimedia.org/wikipedia/commons/8/89/CottonYield.png>

Another field in which Saurashtra has made rapid strides and Vidarbha is stagnating is dairying. Figure 6 shows that Saurashtra was way ahead of Vidarbha in dairy production even before 1990; its milk production during mid-1980s was nearly 3 times higher than Vidarbha. Since then, however, Saurashtra has further increased its lead over Vidarbha. In 2008-09, its milk production was nearly 4 times larger than Vidarbha's. In terms of farmers' cash income, this has great implications. At Rs. 30/kg of farm gate price of milk, Saurashtra's dairy production amounts to Rs. 6000 crore⁴/year at 2011 prices (roughly Rs. 15000/ha of net sown area) against Vidarbha's little over Rs. 1500 crore⁵ (roughly, Rs. 3120/ha of net sown area).

Figure 6 Saurashtra and Vidarbha-Trends in milk production



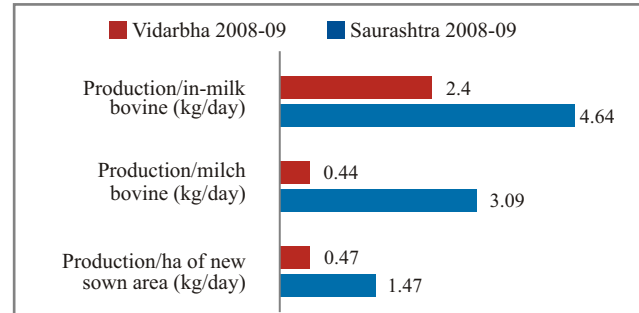
(Compiled by authors from district-wise estimates of milk production by National Dairy Development Board, Anand)

⁴One crore = 10 million

⁵Assuming Vidarbha's milk producers get the same price for milk as Saurashtra's get, which is highly unlikely.

Saurashtra's dairying boom is the result of sustained intensification of its crop-milk mixed farming system (Figure 7). Increase in average productivity of milking animal, improved herd efficiency (proportion of bovine herd in milk at any point in time), as well as higher bovine stocking rates (bovines/ha of net sown area) - all have contributed to Saurashtra's higher milk production compared to Vidarbha. The sum total of all three are reflected in higher milk production per ha of net sown area.

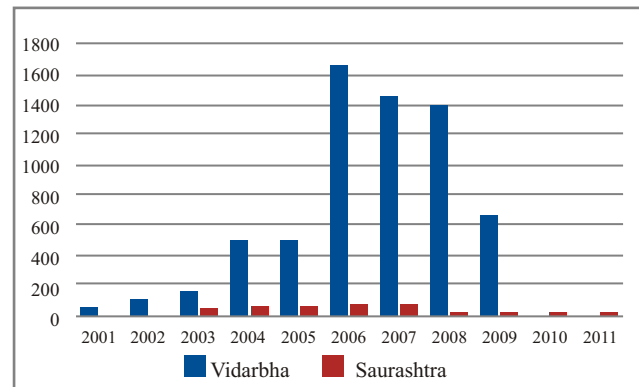
Figure 7 Dairy productivity of Agriculture in Saurashtra and Vidarbha



Source: Milk production data as in figure 6; Integrated Sample Survey Reports, Department of Animal Husbandry, Government of Maharashtra and Director of Animal Husbandry, Government of Gujarat

All in all, general increase in crop productivity, a Bt cotton revolution, rapid expansion in *rabi* cultivation and a boom in dairying have spelt the difference between the dynamism in Saurashtra's agricultural economy and the anaemia in Vidarbha's agriculture. Perhaps the best indicator of the impact is in the vastly different incidence of farmer suicides in Saurashtra and Vidarbha during the

Figure 8 Farmer suicides in Saurashtra and Vidarbha



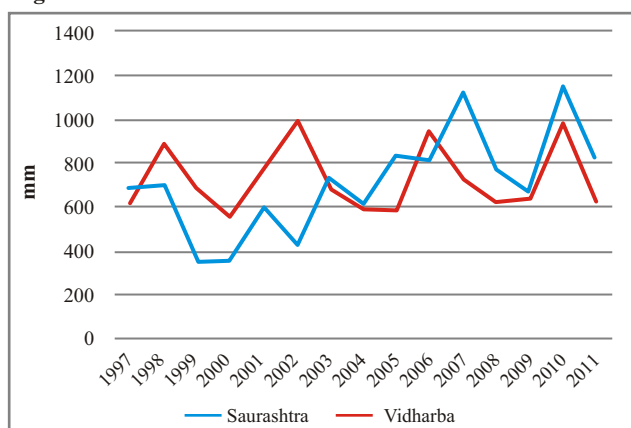
Source: http://shodhganga.inflibnet.ac.in/bitstream/10603/3415/1/0/10_chapter%205.pdf for Maharashtra; Department of Agriculture, Krishi Bhavan, Government of Gujarat, Gandhinagar

recent years as evident in Figure 8. Indebtedness, cotton crop failure, failure of wells in hardrock areas and drought are the four key drivers of farmer suicides (Planning Commission 2006). Both Saurashtra as well as Vidarbha are similarly inflicted by all these four. But Saurashtra farmer is somehow able to cope better than Vidarbha farmer.

DRIVERS OF SAURASHTRA'S AGRARIAN ASCENT

What might explain this sudden spurt in crop and milk productivity per hectare in Saurashtra? Figure 9 plots average annual rainfall precipitation in the two regions for the past 14 years since 1997. Both have highly fluctuating rainfall; in early part of the series, Vidarbha had a little higher rainfall; during the later part, Saurashtra has had a little more rainfall. However, it is unlikely that a few good monsoons alone can explain Saurashtra's agrarian ascent.

Figure 9 Rainfall trends in Saurashtra and Vidarbha



Source: Commissioner of Agriculture, Government of Maharashtra and Department of Agriculture, Krishi Bhavan, Government of Gujarat, Gandhinagar.

Neither can other conventional drivers of agricultural growth such as public investment in roads, canals, agricultural markets, etc. as Table 1 shows. If Vidarbha has only 7 percent of its net sown area under government canal irrigation, Saurashtra has even less, at 4 percent. If the density of Agricultural Produce Marketing Committee (APMC) yards is any indicator of agro-marketing infrastructure, Vidarbha has 2.1 APMCs per one lakh ha of net sown are compared to Saurashtra's 1.4 per lakh ha. A few years ago, Fan et al. (2000) had made a strong pitch that public investment in road network does more to accelerate agricultural growth and reduce rural poverty than anything else, including irrigation. But in this respect too, Vidarbha has far less to complain about than Saurashtra: the former has 1231 km roads/lakh ha of net

Table 1 Drivers of agricultural growth: Saurashtra and Vidarbha

	Saurashtra	Vidarbha
Normal rainfall in mm	643	1076
Percentage of net sown area irrigated by government canals	4	7
Number of electric pumps/1000 ha of net sown area	83	72
Percentage of net sown area irrigated by private wells and tube wells	45	8
Nature and type of aquifers	Hardrock	Hardrock
APMCs/1 lakh ha of net sown area	1.4	2.1
Roads in (km)/1 lakh ha of net sown area	574	1231

sown area compared to the latter's 574 km. If Fan et al. (2000) were correct, Vidarbha agriculture should be raring to go, which it isn't.

The real reasons why Saurashtra agriculture is reviving up and Vidarbha agriculture is idling all these years may be many. But a slew of Gujarat government actions has played a strong catalytic role in Saurashtra agriculture growth. Gujarat government's annual *Krishi Mahotsav* (Agrarian Festival) has reinvented and infused new life in a moribund system of agricultural extension (Shah et al. 2012). On GM crops, Gujarat government has been more proactive than government of India. During the early years of the millennium, when scientists, NGOs and central government were still debating the pros and cons of GM crops (as they continue to do today), Gujarat government actively supported Bt cotton. It allowed private Bt cotton seed producers to flourish even in violation of the policy of Government of India. When exorbitant seed prices worked against farmers, Gujarat government prevailed over big Bt cotton seed companies to halve the prices of Bt cotton seed declaring it as an 'essential commodity' under a 2006 Act. But later when Gujarat farmers themselves emerged as major seed suppliers to other states, Gujarat allowed Bt cotton seed prices to rise, showing where its priorities lay. Gujarat was also amongst the first states to liberalize the APMC act to free farmers to sell their produce direct to processors. In early 2012, no cotton growing state opposed Government of India's quixotic ban on cotton

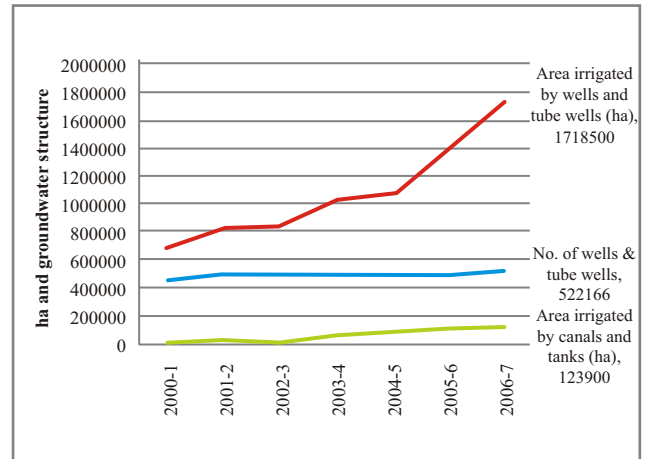
exports as Gujarat's government did. Now, to get Gujarat's cotton farmers even better deal and to insulate him from the vagaries of whimsical national cotton export policy, Gujarat government has been aggressively pursuing a new textile policy for vertical integration from farm-to-fibre-to-fabric-to-fashion-to-foreign markets. Time will tell what this new policy does for Saurashtra's cotton farmer. But clearly, here was an administration with an ear to the ground that has been pragmatically pursuing the interests of its own peasantry.

In explaining Saurashtra's agricultural ascent relative to Vidarbha's, four specific developments played an important role: decentralized groundwater recharge movement, *Jyotigram*, boom in Bt cotton and wheat, and a belated dairy revolution. The state government played an active role in all these. Saurashtra has experienced a booming groundwater irrigation economy which is anaemic in Vidarbha. It is not as if Vidarbha is not adequately plumbed for intensive groundwater irrigation. As Table 1 shows, its density of electrified groundwater structures is nearly as high as Saurashtra's. Yet, just about 8 percent of Vidarbha's net sown area is irrigated by groundwater in contrast to Saurashtra's 45 percent. Our working hypothesis is that two things that happened in Saurashtra, and have not happened in Vidarbha, may have played a big role.

First, Saurashtra has experienced a mass movement for rainwater harvesting and decentralized groundwater recharge on a scale unparalleled anywhere else. Initially begun as an autonomous movement driven by Hindu religious leaders, diamond merchants of Surat and Brussels, and NGOs of various hues, the BJP government of Keshubhai Patel actively supported this movement. After 2000, the Modi government strengthened government support to the recharge movement even further by formulating *Sardar Patel Sahkari Jal Sanchaya Yojana* to liberally support village communities in constructing hundreds of thousands of community-managed groundwater recharge structures.

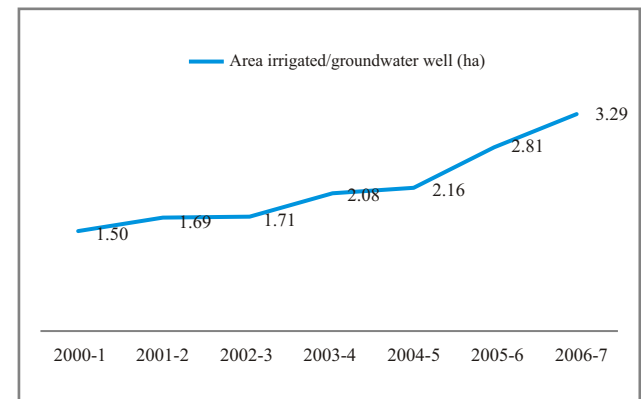
Second, Saurashtra benefitted from *Jyotigram* scheme under which farm power connections, connected to a separate feeder, are being provided 8 hours daily of uninterrupted power supply of full voltage. If the recharge movement improved groundwater availability, reliable power ration around the year has helped Saurashtra farmers to convert available groundwater in to reliable irrigation. As a result, between 2000-01 and 2006-07, the gross area irrigated by groundwater wells in Saurashtra increased nearly three times (Figure 10), thanks to sustained increase in the gross area irrigated per well and tubewell from 2000-01 to 2006-07 (Figure 11). The big

Figure 10 Acceleration on groundwater irrigation in Saurashtra



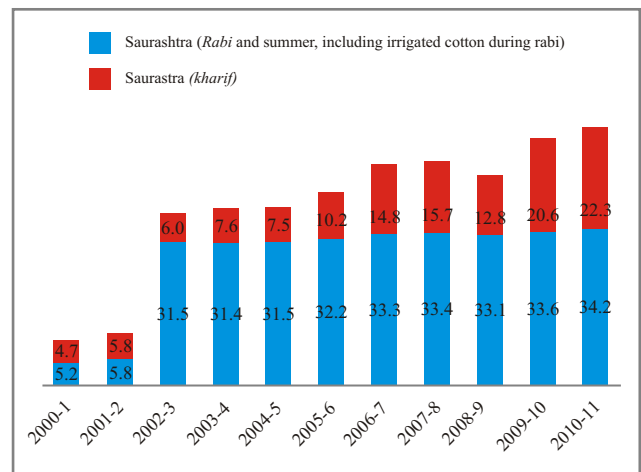
Source: Season and Crop Reports

Figure 11 Saurashtra: average gross area irrigated/groundwater well (ha)



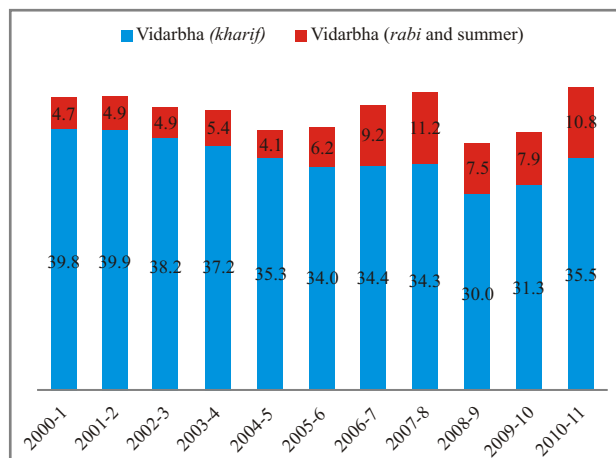
Source: Season and Crop Reports

Figure 12 Saurashtra: Growth in use of farm land during rabi and summer (lakh ha)



Source: APY data and season and crop reports Department of Agriculture, Krishi Bhavan, Government of Gujarat, Gandhinagar

Figure 13 Vidarbha: growth in the use farm land during *rabi* and summer (lakh ha)



Source: Department of Agriculture, Government of Maharashtra

increase in *rabi* and summer cultivation in Saurashtra relative to Vidarbha (Figures 12 and 13) has enabled Saurashtra farmers to transform Bt cotton into a roaring success, to increase their area under other irrigated food and cash crops such as wheat, castor, cumin, onion, chilli. This has had a knock-on effect of its own. Increase in wheat crop also increased the production of wheat straw that has made it possible to expand Saurashtra's dairy herd. It must be remembered that while milk yield per animal is determined by input of green fodder and concentrate feed to milking animals and their genetic potential, the size of the milch herd is determined by the availability of straw needed to provide maintenance ration to bovines during their unproductive months.

At the root of the belated dairying revolution in Saurashtra lies an ideological feud about how best to organize dairy producers between Amul, owned by the Gujarat Cooperative Milk Marketing Federation (GCMMF) and Mother Dairy owned by the National Dairy Development Board (NDDB). Until the late 1980's, both were devoted to dairy development through Amul pattern cooperatives but both neglected organization of cooperatives in Saurashtra because they thought cooperatives would not thrive in Saurashtra's fractious social environment.

In the wake of economic liberalization in 1990-91, the dairy policy too was liberalized and all restrictions on the entry of private sector domestic and multi-national players in dairy industry were dismantled. A debate started about whether the politics-ridden Amul-type co-operatives that had thrived under a monopoly situation hitherto would be able to withstand cutthroat competition from private competitors that would begin crowding the dairy industry. The post-Kurien NDDB leadership perceived the need for

a new-generation cooperative (NGC) - lean, mean, agile, professionally managed and less vulnerable to farmer as well as party politics - to take on the competition. Amul however remained faithful to the Amul pattern.

This ideological rivalry set the stage for a turf war between Amul and Mother Dairy that gave a powerful shot in the arm to dairy development in Saurashtra. In its search for districts to pilot the NGC idea, the Mother Dairy sought entry into Saurashtra; and the government of Gujarat readily handed over all six government dairies to NDDB for setting up milk procurement, processing and marketing operations in Saurashtra beginning with Junagadh. Soon thereafter, Amul - which until now had thought co-operatives were hard to run in fractious rural Saurashtra - unleashed a co-operative organization spree and created 1600 village dairy cooperatives in a short span of two years collecting a million litres of milk daily. This competitive drive to establish the superiority of alternative organizational models led to rapid increase in milk procurement by the organised sector. In 2005, cooperatives were collecting less than 10000 litres of milk daily from Saurashtra; but since then, they grew their presence at a lightning speed. By 2011, Amul and Mother Dairy together were already collecting around 16 lakh litres/daily of farmers' milk from over 3000 villages; and the two were growing their milk procurement at 30-40 percent per year, adding dairy co-operatives or Bulk Milk Chillers in 1200-1500 new villages per year. During this period, the milk procurement price paid to farmers soared from Rs. 14.35 to Rs. 31.5 per kg of milk with 7 percent fat content. Reliable market and remunerative prices generated powerful incentive for Saurashtra farmers to intensify dairy production by increasing milk yield, improving genetic potential as well as expanding the bovine herd size as we saw earlier. Rising wheat area, more reliable water availability and improved drought resilience further supported this belated white revolution of Saurashtra.

DEVELOPMENT DEPRESSANTS IN VIDARBHA

Vidarbha situation is a complete contrast to Saurashtra's. The poor conditions of agricultural power supply in Vidarbha have been best captured by *Gabharicha Paus* (The Damned Rain) an award-winning Marathi feature film about the life of a gutsy Vidarbha small farmer who got a borewell and electricity connection to save his cotton crop from a drought. Thanks to erratic power supply, the pump did not work and the farmer lost his life trying to hook a line on high-voltage transmission cable to run his pump. Poor quality and quantity of agricultural power supply and drying up of wells after December are the key reason why cotton cultivation has become the

millstone around the neck of Vidarbha farmers. Vidarbha farmers have switched to Bt cotton which produces best results under precisely-timed 4 or 5 irrigations. But most Bt cotton - with high input costs - is grown in Vidarbha under rainfed conditions. In Saurashtra, farmers keep picking cotton during winter and much of summer; in Vidarbha, cotton is removed from the fields soon after the monsoon when the same plants can provide several additional pickings during winter and summer.

Interventions to stimulate dairy development in Vidarbha have put the cart before the horse. Government schemes provide poor households cross-bred cattle and buffaloes. However, one of the enduring lessons of India's white revolution is that without first developing a reliable and remunerative market for milk, attempts to increase milk production are destined to fail. Rural Vidarbha has no organizational structure for marketing milk. In 20 years up to 2010, Maharashtra's milk processing increased 5-6 times; but all the growth was concentrated in Western Maharashtra which today contributes 80 percent of the milk processed and marketed in Maharashtra while Vidarbha contributes all of 8 percent (India Market 2000). A major milk demand centre in Vidarbha such as Nagpur even today is not supplied by Vidarbha farmers but by farmers from Jalgaon, Aurangabad, Kolhapur and faraway Gujarat. Most Vidarbha districts have no dairy cooperatives; and private companies would not invest in building a procurement, processing and marketing system unless there are viable milk sheds with high density of milk production to make procurement profitable. It is not surprising that a Planning Commission fact finding mission in 2005 found that Vidarbha farmers showed no interest in the dairy business. Why would they? Even Saurashtra farmers had little interest in dairying until the mid-1990s. But no sooner had a reliable and remunerative market for milk emerged than farmer investment in increasing dairy production boomed with the result that we analysed. Around 2006, milk procured from farmers was just around 65000 litres/day from six of the most suicide-hit districts of Vidarbha compared to a crore litres daily from the 10 Western Maharashtra districts. The need in Vidarbha clearly is not to give away cows or promote artificial insemination but first to establish a reliable milk procurement, processing and marketing structure. In 2006, NDDB's Mother Dairy offered Maharashtra government

to establish such operations in Vidarbha; and instead of grabbing this offer with both hands, as government of Gujarat did in Saurashtra, last heard, the Maharashtra government is still procrastinating over how to deal with this God-send.

CONCLUSION

Vidarbha's agrarian stagnation and resultant stress on its farmers showing up in high suicide rates has been explained in terms of six 'growth depressants' which are so hard to change in quick time that Vidarbha's agriculture appeared condemned to stagnation for a long time. The failure of all manner of 'special packages' designed to jumpstart Vidarbha's agriculture gave added credence to this swansong. However, accelerated growth of agriculture in Saurashtra, which suffered even more than Vidarbha from the six 'growth depressants', raises new questions about this received wisdom about what ails Vidarbha's agriculture.

This Highlight has argued that Saurashtra's success has been aided by a succession of good monsoons but is crafted by a pragmatic and proactive governance of its agricultural economy. Government actions that have played a strong catalytic role in Saurashtra include: [a] explicit and sensible support to community based water harvesting and groundwater recharge movement; [b] *Jyotigram* and a policy of supplying an 8 hour ration of quality power supply to agriculture; [c] annual organization of *Krishi Mahotsav*; [d] allowing private Bt cotton seed producers to flourish even in violation of national policy; [e] controlling Bt cotton seed prices to affordable levels, when central government battled for seed multinationals; [f] later allowing Bt cotton seed prices to rise as Gujarat farmers emerged as major seed suppliers to other states; [g] handing over government dairies to NDDB to operate; and liberalizing the APMC act to free farmers to sell their produce direct to processors. Here was an administration that was pro-farmer in a steadfast and opportunistic way. All these have opened up new economic opportunities in agriculture; and the Saurashtra farmer has responded in full measure. Many of these policy actions are readily replicable in Vidarbha, and there seems no reason to believe that Vidarbha farmer will respond differently from Saurashtra farmer.

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About the IWMI-Tata Program and Water Policy Highlights

The IWMI-Tata Water Policy Program (ITP) was launched in 2000 as a co-equal partnership between the International Water Management Institute (IWMI), Colombo and Sir Ratan Tata Trust (SRTT), Mumbai. The program presents new perspectives and practical solutions derived from the wealth of research done in India on water resource management. Its objective is to help policy makers at the central, state and local levels address their water challenges – in areas such as sustainable groundwater management, water scarcity, and rural poverty – by translating research findings into practical policy recommendations. Through this program, IWMI collaborates with a range of partners across India to identify, analyze and document relevant water-management approaches and current practices. These practices are assessed and synthesized for maximum policy impact in the series on Water Policy Highlights and IWMI-Tata Comments.

Water Policy Highlights are pre-publication discussion papers developed primarily as the basis for discussion during ITP's Annual Partners' Meet. The research underlying these Highlights was funded with support from IWMI, Colombo and SRTT, Mumbai. However, the Highlights are not externally peer-reviewed and the views expressed are of the author/s alone and not of ITP or either of its funding partners.

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