



National Centre for Cold-chain Development

Committee on Supply Chain and Logistics

North Eastern States Visit Tour Record

*Connectivity and Post
Harvest Marketing*

29-OCTOBER TO 2 DECEMBER 2012

Cold Supply Chain & Agri-Marketing

Background

The Committee on Supply Chain & Logistics (CSCL), constituted under the National Cold-chain Development Centre (NCCD), undertook a study tour of Assam & Arunachal as part of developing understanding of concerns in the North Eastern States. There existed minimal information on agriculture based supply chain concerns in this region. The tour was undertaken and lead by CSCL committee member Shri Ramesh Kumar, between 29th October and 2nd December, the onset of winters 2012.

The committee supported in preliminary preparations and in facilitation of this tour.

The Objectives of the visit was as following:

- To have a firsthand feel of the various development works in north eastern region.
- To review existing infrastructure with respect to Agricultural produce in the region.
- To assess factors inhibiting efficient commerce and competitiveness of local agri-marketing supply chains.
- To interact with local farmers and aggregators to assess future possibilities.

During this visit, Shri Ramesh Kumar visited only 2 states due to time and logistics constraint.

The support from State level officers and local farmers in the region was imperative for successful execution of the tour and they are appreciated for their dedication and cooperation.

The encouragement and guidance from Director NCCD Shri Shailendra Kumar, Asst Director NCCD Shri S. K. Kaul and Chief Advisor NCCD Shri Pawanexh Kohli made this tour possible.

During this 35 day visit, Mr. Ramesh Kumar met more than 150 growers of orange, pineapple, apple, kiwi, litchi, passion fruit, black pepper, turmeric, ginger, large cardamom, cinnamon, etc. He also interacted with several District Horticulture Officers and Horticulture Development Officers, Horticultural Field Assistants and Grafters working for respective state governments. Site visits to 5 available Cold Storages in Assam, were also undertaken.

This Record of this visit consists of:

- **Executive Summary & Evaluation**
- **Key Observations and Key Take Aways**
- **Compilation of Suggestions from the field.**
- **List of People Met**
- **Record of Interactions**
- **Audio Archive**
- **Tour Report-Images & Commentary**

Executive Summary

The interactions held indicate a demand for improved connectivity to buying markets. Direct links with end retailers or wholesalers is missing.

1. The region has various ongoing development activity linked to source agriculture.
2. While some cold storage infrastructure exists, locally sourced commerce is missing.
3. Further development focus preferably be in developing a market for agri-produce offtake with primary strategic directions:
 - a. Packhouses and collection centres linked to market based cold storages are required. Bringing external markets within reach by improving connectivity; to link existing infrastructure to markets through reefer trucking or air shipments for selected items.
 - b. Locally placed processing units which perforce source local agri-produce. Food processing plants seem preferable choice, focused on product type from the region.
4. Infrastructure & industry presence exists though minimal. Focus on skill development; for cold chain operations and modern financial transactions are required. Entrepreneurship and employment opportunity exists.

Evaluation

1. Farm gate production levels are at positive high. Farmers are aggressive in approach and willing in mindset. Only inhibited due to lack of market reach or due to a limited presence of organised buying base.
2. Factors inhibiting faster growth in agri-commerce,
 - a. Limited market access to the farmer base, entirely reliant on small aggregation.
 - b. Buying centres are selective and not building evacuation modes across grades.
 - c. No external intervention for fast track dispatch and transport to nearby consumption centres.
3. There has been little local collaborative initiative focused on creating a supply line to external markets. Focus has been on infrastructure development only.
4. Pilot Projects to commence supply chains from farm to markets are recommended.

Key Observations

- **Fruit growers demand; help us ‘sell more’ instead of telling us ‘grow more’.**

Area expansion programme is underway throughout northeast. Due to lack of marketing expertise and business making capability, growers are unable to push their produce out of their farmgates. District Horticulture Offices, peopled by experts who advise on best production practices and not a single word on how to market.

- **Superabundance of fruits, but lack of road connectivity is the hindrance.**

Year after year, more orchards reach ‘fruiting’ season thus adding to the previous year’s output invariably. Secondly, the existing orchards rarely drop volumes. In toto, there is superabundance – or uncontrollable glut. Farmers crib that excess production does not result in higher returns because buyers citing transport bottleneck in Arunachal, ‘blackmail’ growers into accepting very low prices. Distress sale? Yes.

- **No dedicated horti-produce marketing set up at state level. Still in infancy stage.**

Both in Assam and Arunachal, there is no separate Marketing Board to promote marketing of horti-produce. However, both states boast of Agri Marketing Board. In Arunachal, there is a greater realisation that Horti Marketing Board is need of the hour. Such a body is contemplated and rules & regulations are in place. But it is yet to be 'peopled'.

- **NHM-funded high value flower projects abandoned/converted into vegetable polyhouses due to farmer-owners' inability to market on his own.**

National Horticulture Mission (NHM) has funded a few floriculture projects with an emphasis on roses in Rupa, falling under Bomdila jurisdiction. These projects were started with an outside-exporter/buyer of these flowers under an MoU for a specific period. Once that MoU expired, the buyer-seller arrangement elapsed leaving the grower (seller) in a lurch. Lack of his marketing capability and the absence of any local market, compelled them either to abandon high value rose in polyhouse projects or convert them into vegetable patches.

- **APEDA & NERAMAC are not active, though physically present.**

Growers complain that neither of these government bodies contributed anything to help them market their horti-produce. Yes, both these bodies set up pavilions whenever there is an exhibition or workshop, but otherwise no active farmgate level interaction. Neramac is believed to be short of funding and hence low staff strength across the region.

- **Little interaction with Shillong-based North Eastern Council especially for Arunachal.**

North East Council was set up to facilitate states in the region to gain expertise and assistance in all areas. Arunachal officials's experience tells a different tale. It is alleged that NEC interaction is negligible or even non-existent.

- **National Horticultural Board-Guwahati regional office is more of administrative arm instead of being a marketing-facilitator.**

NHB-Guwahati managed by a Regional Director admits that he has been turned into performing 'clerical and administrative' task. He is left with little time to promote horticulture in the region. Limited staff strength is also cited as reason for non-action. But he does attend meetings when held in Guwahati and put up stalls at Exhibitions wherever and whenever. No regular interaction/inspection of cold storages etc funded by NHB over years.

- **Assam is a millstone round Arunachal's neck – infrastructure-wise.**

Strange but true. To move from one point to another point within Arunachal, one cannot reach directly. One has to exit Arunachal, travel a certain distance and re-enter Arunachal. For instance, Itanagar to Bomdila or Tezu to Roing etc. are prime examples. With regard to evacuation of horti-produce (from Tezu/Wakro/Roing to Guwahati/Karimganj/Tezpur/ Tinsukia), the challenges on Assam roads from RTO, Traffic Police and the mushrooming extortionists are too many to enumerate. All these have a cost element to it thus pushing up the landing cost and hence compelling buyers to demand that sellers bear these exorbitant costs. No wonder oranges sell at farmgates at

Rs.70 paise/fruit; pineapple @ Rs.5 at farmgate. It is estimated that per kilometer cost of horti-produce movement from Arunachal is Rs.4.75/kg. Hortiproducers get no transport subsidy.

- **Govt-owned food processing unit lying unused for years due to operational challenges.**

A huge food processing facility was set up with a lot of fanfare in Nagmoi, Aalo, Arunachal more than a decade ago by state government's industrial development arm. Initially, growers agreed to sell at wholesale price. Subsequently began demanding market price, thus making it unviable for govt to run it. Though it was shut down, later private sector was brought in to revive. This also failed. Now this is lying idle in the midst of pineapple and orange belt.

- **Basic market promotional steps such as collection centres, packing houses non-existent.**

Growers have no post-harvest facilities today. Many kiwi growers keep their harvest in their homes spread on floor. No collection centres. Nor are any packing houses which possibly can help value add and sell it a better price than what they get now.

- **Growing fruits is NOT the full time occupation. All engaged in executing government contracts for roads, culverts etc.**

Not a single grower depends on horticulture as their mainstay. Why? Long gestation period and concern about managing family: son's education, daughter's wedding, emergency healthcare expenses etc. So, without exception, they are after some government contract or other and this lack of seriousness also shows in poor maintenance of orchards. Barring a few, most of them are just jungles.

- **Lack of how to do business ability: rigid stance on product pricing and refusal to negotiate.**

It is not that big businesses have not approached Arunachal growers of kiwi, orange etc. But Arunachalis inability to grasp finer aspects of business has led them down. For instance, Tata group signed a MoU with Ziro kiwi growers at Rs.70/kg for sizes ranging from 60-100 gm. After delivering the first 10 MT consignment, growers backed out because they told Tatas to take all sizes or nothing at all. Tatas walked out of the contract. And ... 600 quintals of kiwi was lying and rotting with no buyer in sight. Big Bazaar did approach Rupa for kiwi in 100 gm and above range. Growers said no due to worries as to what to do with rejected size. Ideally such rejects would have gone to processing units if only they existed.

- **Assam cold storages are potato-centric and used as market-leveraging tool by trader-owners.**

Out of four cold storages, funded by NHM in Assam under Technology Mission, only one in Tinsukia provides a small chamber for apples, pears, etc from Kashmir and China. Otherwise, the huge capacity built is exclusively for potato. All these cold store owners are traders. They did try accommodating fresh vegetables but stopped because temperature control becomes a big issue and vegetables were spoilt resulting in business loss. Potato focus enables them to maintain one single temperature and longer shelf life.

- **Arunachal's organic fruits (orange and pineapple) exported to the Gulf & Europe via Bangladesh under the label of "Produce of Bangladesh".**

Representatives of Karimganj exporters to Bangladesh conduct business with Arunachal growers of kiwi, orange etc. Fruits are transported by road to Karimganj where it is sorted and graded and then pushed into Bangladesh via riverine route. Inside Bangladesh, these fruits are packaged as full size fruits or sliced or juiced for export to the Persian Gulf and Europe. Significantly, they are marked as ‘Produce of Bangladesh’, though it is an Indian product originally. One can buy these Bangladesh-made juice packs in Arunachal!

- **Higher tariff/duty on Indian agri/hortiproduce at Indo-Bangladesh border vis-à-vis Bhutan/Nepal items.**

There is a stiff Rs.31/kg duty tag on Indian oranges/kiwi at Indo-Bangladesh border. And Rs.19/kg on Indian ginger. But same produce from Bhutan and Nepal attract no such additional duty.

- **State governments demand reunification of food processing arm with agriculture.**

There is a disconnect by keeping horti/agri departments and food processing departments separate. Horticulture department wants food processing be clubbed with it for better understanding and better service to growers.

- **Absence of Farmers Management Group/Cooperatives in Arunachal.**

Unlike Assam, where the FMGs are popular – crop-wise, district wise – Arunachalis yet to group themselves to derive benefits of collectivization in terms of knowledge sharing and better business negotiation with potential buyers. Some have come up, but still in infancy.

- **Large Cardamom drying process by Spice Board route more advantageous to growers than Arunachal government funded process.**

Large Cardamom growers have a choice now: to go for Spice Board approved, but marginally expensive dryer and get higher price realization because these final produce does not smell ‘smoked out’ and don’t turn into black. On the other hand, Horticulture Department provided dryer smells and turns cardamom into black. This is because, the fire and smoke physically touches green large cardamoms whereas the Spice Board dryer controls fire and smoke and permits only the heat to reach green large cardamoms. Need for a design rectification.

Key Take Aways

- **Engage** with Bangladesh on indiscriminate tariff on Indian horti-produce since Bangladesh and India are SAARC members.
- **Engage** Inland Water Authority of India to explore moving of Arunachal horti-produce via River Siang/Brahmaputra to Guwahati.
- **Revive/Explore** private sector engagement to help high value flower growers to market through fresh MoUs.
- **Infuse** dynamism in National Horticultural Board - Guwahati by inducting marketing officers

- **Involve** Concor India to extend Horti Trains upto Tinsukia to help Arunachal fruit growers to reach out mainland India.
- **Setup** a Co-ordination Committee under NHM to monitor APEDA, NERAMAC, NHB-Guwahati and NEC.
- **Speed up** setting up of Collection Centres in Arunachal (a low cost option) for evacuation of horti-produce to Guwahati (nearest big market) and to mainland India.
- **Roll out** a hassle-free horti-truck movement with special identifiable permits from Arunachal to Assam (Guwahati or Karimganj) for domestic or export markets.
- **Educate** growers on the importance of basic farmgate/packing house best practices: cleaning, grading, packing through the state horticulture marketing board.
- **Slash** down gestation period of kiwi/orange/apple/pears/walnut (6-10 years) to 2-3 years through Agri Research Institutes to help growers focus on horti production.
- **Introduce** transport subsidy for horti-produce growers to meet part of huge transportation cost due to lack of road connectivity.
- **Encourage** farmers cooperatives through propaganda and exposing them to live examples of such groups in Assam or elsewhere.
- **Quicker release** of funds under Prime Minister's Package for speedy implementation of Trans Arunachal Highway, linking of 17 district headquarters.
- **Upgrade technology** of dryers for large cardamom to achieve better quality and high price realization for growers.
- **Encourage** cheaper farmgate collection centres instead of expensive cold storages.
- **Showcase** new gen progressive farmers to others within Arunachal on how these growers are making a Big Difference.
- **Spread** the Wakro circle practice of collective price fixation committee of horti-produce (growers, buyers, district horticulture office & deputy commissioner office) to the entire state of Arunachal.
- **Seek & indulge** new gen Arunachalis (wards of fruit growers), who have been educated in mainland India with management degrees, to help their parents focus on marketing on their own, despite state horti marketing board.
- **Fund and give directions** for opening up of industrial training institutes (ITIs) with more focus on value-added food processing practices for new job opportunities within the state.
- **Explore & encourage** airlifting of horti-produce from north-east to mainland India by encouraging Air India and private air carriers under the CSR route to begin with.

- **Create awareness** about Arunachal Kiwi – the most organic variety in the world – through a systematic publicity campaign through print, TV and web.
- **Open DIRECT channels** for horti-producers in north east to sell to the Indian Army/ Navy/Air Force instead of routing through contractors hired through Tenders. North east has a huge presence of army bases and a big buyer.

UPDATES:

- Met Mrs Jayashree Chatterjee, Vice Chairman, Inland Water Authority of India.

Compilation of Suggestions From the Field

The following Challenges and suggested Solutions were put up during interactions.

Challenges	Solutions
<p>1. Connectivity Basic ingredient for marketing of horticulture products (orange, pineapple, pears, large cardamom, kiwi, ginger, turmeric etc) is road connectivity to the nearest wholesale market.</p> <p>Arunachal Pradesh DOES NOT have proper road connectivity. No two district hqs are linked directly.</p>	<p>LONG TERM/PERMANENT SOLUTION</p> <p>The Trans Arunachal Highway, currently underway, be ready in 5-6 years' time.</p> <p>MID TERM SOLUTION</p> <p>A) Use of Horti Train Currently Concor-managed Horti Train goes up Kolkota/Guwahati with Bhusaval-grown Bananas.</p> <p>This 42-rake train may go upto Dibrugarh/Tinsukia in Assam and 'evacuate' Arunachali horti produce into mainland.</p> <p>B) Use of Brahmaputra/Siang River The Brahmaputra/Siang River runs through Arunachal & Assam . Orange growing regions like Tezu, Wakro can push its produce on river to Dibrugarh/Johat/Tinsukia/Golaghat (all Assamese touchpoints where the river flows through for value-added processing industries can come up giving employment opportunities to Assamese.</p> <p>Brahmaputra Board set up to manage flood management/control can be roped in along with Inland Water Authroities of India.</p> <p>Desilting and dredging of Brahmaputra can achieve three objectives: primarily, reduce the water level and thereby reduce damage to land and property every year.</p> <p>Secondly, can turn Brahmaputra into a more navigable river for trade and commerce.</p> <p>Thirdly, every year, govt spends tonnes of money on disaster management due to Brahmaputra flooding. This can be brought down, if not eliminated totally.</p> <p>C) Use of Air Connectivity Dibrugarh has an airport for commercial purpose and all airlines touch down. Cargo can be airlifted to mainland.</p> <p>However the issue is that cargo rates (Rs.20/kg) seems to be on the higher side. May have to be subsidized judiciously so that air carriers get into this biz.</p>
<p>2. State Marketing Boards</p>	<p>Arunachal Pradesh has constituted a Horticultural Produce Marketing Board on paper – away from Agricultural Produce Marketing Board.</p> <p>Need to be populated with right set of people with marketing expertise.</p>

Challenges	Solutions
	<p>Development officers should not be elevated/transferred to these positions because marketing needs a different mindset.</p> <p>Currently Arunachal has 5 Horticulture Marketing Officers (none of them have any marketing experience) and farmers don't believe these HMOs have anything concrete to help them out.</p> <p>As per state govt plan, each of the districts (17 in total) should have one HMO each a.s.a.p.</p>
<p>3. Marketing Infrastructure</p>	<p>a) Collection Centres at selected growing centres has to be expedited. Arunachal Pradesh government has received recommendations from District Horticultural Officers (DHOs) inputs on this already, but yet to act upon.</p> <p>b) Clamour of mini cold storage in each growing district is very much there. Their logic is to store and wait for 'right time to market their produce'.</p> <p>Need not be conceded. Farmers will consider this facility again as freebie and will not be ready to foot any rent for usage. As it is, most of farming happens on its own with very little effort on the part of growers: free land, free sapling, free fencing, zero-maintenance.</p> <p>c) Mobile vans be introduced for collection from farmgates for aggregation at collection centres.</p> <p>d) Usage of bins/crates be encouraged to get into some kind of good packaging practices. Now fruits are dumped in trucks and pushed out at farm gates. In transit loss is very much there.</p> <p>e) Basic value-added services (like segregation, packaging in small lots etc) may be taught at collection centres.</p> <p>This will enhance lifespan of fruits and employment opportunity for locals.</p> <p>f) Transport Subsidy be given to growers who directly push their produce to distant markets. Dispersal of Subsidy on Proof of Delivery with no loss of time.</p>
<p>4. Processing Units</p>	<p>The oldest Processing Unit at Nigmoi, Aalo should be revived with private sector participation. It should be made ready to handle Harvest season 2013.</p> <p>New one coming up @ Pangin (State Industry minister's hometown and constituency) should be given all support to make it a successful model to emulate. The unit has captive orange orchard, but absolutely no marketing plan in place as of now.</p> <p>One more processing is coming up at Rupa, Bomdila district with NGO (Inspire) assistance. Be ready by mid-2013. Marketing to be handled by NGO through buy back arrangement (Dabur is believed to have signed for tomato ketchup).</p>
<p>5. Institutional Support</p>	<p>NERAMAC and APEDA have physical presence in Guwahati and state capitals. But very little farmer's connect.</p> <p>Need for a coordinated approach to market Arunachal or regional</p>

Challenges	Solutions
	<p>produce as NERAMAC can take care of domestic (read mainland India) and APEDA, the huge export potential of ‘organic ‘ fruits.</p> <p>NHB-Guwahati should be energized to play a proactive role. Today, NHB-Guwahati functions like an administrative desk, not active enough on the marketing side.</p> <p>Since both NERAMAC and APEDA have a wider international/national/regional perspective, they can do a better job than what they do now.</p> <p>NHB-Guwahati should visit districts/state capitals more often for farmers connect.</p>
<p>6. Business practices</p>	<p>Contracts are not getting consummated because lack of business mindset or awareness.</p> <p>For instance, Tata’s MoU with Ziro kiwi farmers fallen flat due to growers’ refusal to sell only 60-100 gm kiwis after the first dispatch of 10 MT. Growers want Tatas to take all sizes or none at all. Tata walked out, leaving 700 quintals of kiwi lying at farmgates in Ziro.</p> <p>Again, Big Bazaar’s readiness to buy 100 gm and above met with resistance and BB walked out without transacting any business.</p> <p>The so-called rejects could have been sent to food processing units, if such units were in place within state or outside provided the Marketing Board has carried out regular market intelligence exercise and know to whom these ‘rejects’ can be marketed.</p> <p>That is why, the Marketing Board be peopled with people with right skillset.</p> <p>Most importantly, growers in Arunachal be exposed to normal business practices.</p> <p>They need to understand that entire yield need not be bought by a single buyer and they should be ready to sell to multiple buyers of different needs.</p> <p>Marketing Board’s role is to educate growers on these crucial aspects as well, besides generating large scale buying interest from mainland India and abroad.</p>
<p>7. Neighbourhood Issues</p>	<p>Arunachali produce cannot exit out of its boundaries into mainland or wherever without crossing Assam, its southern neighbour.</p> <p>Frequent bandhs, extortion/RTO hassles make life difficult for Arunachali growers.</p> <p>National Permit of trucks for a fee of Rs.15,000 per annum with promises a hassle free transport movement is just on paper. Not implemented. Arunachal/Assam is no exception. NPS is a big let down at the national level. Should be taken up.</p>

<i>Challenges</i>	<i>Solutions</i>
	<p>Both Assam and Arunachal govts should sit together and chalk out a solution for speedy and smooth passage of Arunachal products into mainland India etc.</p> <p>NHB-Guwahati should be involved in this.</p>
<p>8. Growers' Mindset</p>	<p>Arunachali farmers are the most pampered lot.</p> <p>Free land, almost, allotted by state government.</p> <p>Saplings free under Technology Mission or at rock bottom prices from govt nurseries.</p> <p>Fencing again free or heavily subsidized.</p> <p>Fertile land and needs little attention.</p> <p>Everything happens on its happen.</p> <p>So, growers have taken things lightly.</p> <p>Whatever price offered by the buyers from Karimganj for export to the Gulf via Bangladesh is 'manna' for these growers.</p> <p>Sale to these middle men in two ways: entire orchard at a lumpsum amount or per fruit basis. On an average the price is 60 -70 paise/fruit or Rs.one lakh around for entire orchard of vast size.</p> <p>There are growers who get Rs.3 lakh for entire orchard also, but still feel shortcharged given the volume they offer to buyers.</p> <p>There is NO change of ownership or business sense among growers. Since their investment in any orchard is almost negligible, they have taken it lightly.</p> <p>Secondly, the gestation period of orange is 6-7 years before fruiting happens.</p> <p>Walnut – 10 years. Apple – 6 years approx.</p> <p>So every single grower is not focused on horticulture. It is a SIDE BUSINESS. Their main source of income or attention is handling govt contracts for bridges, culverts, roads etc. More money and instant payment.</p> <p>Orchards, therefore, are not maintained properly with deployment of helping hands. Many orchards look like jungle!</p> <p>If well maintained, output may leapfrog and add to state GDP.</p>
<p>9. Export opportunity</p>	<p>Small clutch of Karimganj buyers dominate the orange space in Arunachal. They buy at throwaway price at farmgates. Growers gladly sell to them for a variety of reasons:</p>

Challenges	Solutions
	<p>One, growers are paid advance payment even before the next season has commenced.</p> <p>Karimganj buyers are like ATM. Growers need for money for family needs such as daughter’s marriage, children’s education in mainland or hospitalization is met instantly by Karimganj buyers.</p> <p>Secondly, the buyers bring in their own labour for harvesting and arrange for their own transport for evacuation.</p> <p>Growers just sit and relax and have to do nothing.</p> <p>Easy money, easy life is growers’ credo.</p> <p>The lethargy is so rampant that no grower visits farmgates even when the harvest is on.</p> <p>Growers just go by what the Karimganj boys ‘tell’ even when the deal is on per fruit basis. So much confidence or so much lethargy?</p> <p>Growers say no government will be able to provide such instant gratifications and Karimganj boys fulfil that need smoothly and efficiently.</p> <p>Karimganj boys ferry Arunachal oranges, pineapples into Bangaldesh where fruits are sorted/processed, packaged and exported to the Gulf with a tag “Made in Bangladesh’.</p> <p>Indian produce sold under Bangladesh branding?</p> <p>NERAMAC has a processing unit in Tripura and operating below par. Can’t it be made use of with whatever little additional investment needed to spruce it up?</p>
<p>10. Cooperative grouping</p>	<p>Unlike Assam where Farmers Mangement Group have sprung up district/village wise in large numbers, Arunachal is yet to see such groups. There are some: Ziro Kiwi Club, Rupa Farmers Club, etc.</p> <p>Neighbouring growers don’t exchange notes on their business.</p> <p>This may change perhaps with the newly constituted Horti Marketing Board insisting on enrolling representatives form groups of growers in district/village/circle level marketing committees to be formed.</p>
<p>11. Brand Promotion</p>	<p>Arunachal govt should go for a nation wide brand promotion of its kiwi – particularly. Even Assamese don’t know much about kiwi.</p> <p>Metros like Mumbai, Delhi, Bangalore import New Zealand kiwi and consume in large quantities.</p> <p>Arunachal Tourism offices across metros can be used to promote Arunachal kiwi by creating a marketing desk in each office and</p>

<i>Challenges</i>	<i>Solutions</i>
	<p>putting sales/marketing personel.</p> <p>Kiwi seems to have natural insulin and a good antidote for diabetics. India has the dubious distinction of world capital of diabetics. Why not get this diabetic curing property be medically examined and if proved to be right, then push it on a national scale by central govt (ministry of health)?</p> <p>Hire an advg agency for this task.</p>
12. Progressive Farmers	<p>Luckily, there is a band of 'progressive farmers' identified and nurtured by Arunachal govt.</p> <p>These are bright spots which act and behave like businessmen anywhere else.</p> <p>Good role models to emulate.</p> <p>They need to be showcased and their experience be shared.</p>
13. Business prospects	<p>Large cardamom growers are happy because they get Rs.300-700/kg</p> <p>Spice Board and state Horti Department are encouraging them with dryers.</p> <p>SB dryer is far superior.</p> <p>Horti Dept dryer, designed by CSIR, Bhubaneswar, turns large cardamom into smoky and dark in colour. SB treated cardamom is far superior and fetches better pricing.</p> <p>Need for fabrication modification of Horti Depart dryer.</p>

List Of People Met

List of people interacted with at farmgates and state government officials:

<i>#</i>	<i>Location</i>	<i>Name</i>	<i>Status & contact details</i>
1	Tezu, Arunachal	Safior Rahman	Horticulture Development Officer Safior.rahman@rediffmail.com Mobile: +9194024 74137 +9192061 49647
2	Tezu, Arunachal	Bindeswari Singh	Horticulture Field Assistant Mobile: +9194022 43363
3	Tezu, Arunachal	Kul Kamal Pandey	Horticulture Field Assistant Mobile: +9198626 01492
4	Tezu, Arunachal	Harish Chandra Sahu	Horticulture Field Assistant Mobile: +9198629 46719
5	Tezu, Arunachal	Ms Jaumiyu Rime Tali	Horticulture Field Assistant Mobile: +9194024 76628
6	Tezu, Arunachal	Dileep Singh (Born & brought up in	Driver, HDO, Tezu Mobile: +9198630 34348

#	Location	Name	Status & contact details
		Tezu. Lot of local insight)	
7	Tezu, Arunachal	Ramanand Sarma	LIC Agent & Farmers Connect Mobile: +9194360 49096
8	Tezu, Arunachal	Bacham So Tayang Tezogam Village	Farmer, Orange, Black Pepper, Ginger, Passion Fruit Mobile: +91 98634 32002 +9194027 54235
9	Tezu, Arunachal	Suhm Tag Tezogam Village	Farmer, Orange, Passion Fruit
10	Tezu, Arunachal	Mrs. Mantulu Tayang Tezogam Village	Farmer, Cardamom, Orange Mobile: +9198628 59472 +9194360 49118
11	Tezu, Arunachal	Sanu Rai	Nepali student studying in Delhi, resident of Tezu Mobile: +9199546 07499
12	Tezu, Arunachal	Rajeev Roy (ex-servicemen)	Owner, Sonali Stores, Tezu Bazaar Mobile: +9194024 78201
13	Tezu, Arunachal	Johnum Manyu Danglad Village	Govt Contractor, Tezu Mobile: +9198628 59472
14	Tezu, Arunachal	Khujulum Tamai Loiliang Village	Farmer, Pineapple, agar (medicinal plant), Black Pepper, Ginger
15	Tezu, Arunachal	Mrs. Difraling Tindia Upper Loliang Village	Farmer, Pineapple, Ginger, Orange
16	Tezu, Arunachal	Soyulum Takliang Hucheliang Village	Farmer, Orange
17	Tezu, Arunachal	Bijoy Takliang Hucheliang Village	Farmer, Orange
18	Tezu, Arunachal	Chowjiang Takliang Hocheliang Village	Farmer, Orange Mobile: +9198638 74659
19	Tezu, Arunachal	Mrs. Gpinglu Takliang Hucheliang Village	Farmer, Orange
20	Tezu, Arunachal	Chowrimso Takliang Hucheliang Village	Farmer, Orange
21	Tezu, Arunachal	Gopal Varma	Contract Farmer from UP- Vegetables 15 years
22	Tezu, Arunachal	Vignesh Varma	Contract Farmer from UP – Vegetables 35 years
23	Tezu, Arunachal	Taluk T Hai	Horticulture Development Officer, Hawai, Anjaan Dist Mobile: +9194362 58086 talukhai@gmail.com
24	Chowkham, Arunachal	Kheram	Farmer, Litchi
25	Chowkham, Arunachal	Madam Hat Chaudhry	Horticulture Development Officer, Chowkham Mobile: +91073082 30677
26	Chowkham, Arunachal	Medo Kamlang	Farmer, Orange, Passion Fruit, Amla, Vegetable
27	Tissue, Arunachal	Chow Lot Namchoon	Farmer, arecanut, orange
28	Tissue, Arunachal	Chow Langka Empey	Farmer, Arecanut, Orange
29	Tissue, Arunachal	Chow Engnalit Manhout	Farmer, Arecanut, Orange
30	Tissue, Arunachal	Nang Kungnelit Manhout	Farmer, Arecanut, Orange
31	Tissue, Arunachal	Ongkut Mernglong	Farmer, Arecanut, Orange

#	Location	Name	Status & contact details
32	Tissue, Arunachal	Arjun Chaudhry	Cloth Merchant from Rajasthan (biz in Arunachal) Mobile: +91089748 85011 Mhchowdhury58@gmail.com
33	Wakro, Arunachal	Soto Thalai Wakro	Farmer, Orange Mobile: +9194360 49200 Mobile: +9187328 02870
34	Wakro, Arunachal	Solemso Ama Wakro BEST FARMER tag	Farmer, Orange Mobile: +9194026 76191
35	Wakro, Arunachal	Dinesh Kumar Singh Representing Karimganj exporter	Buyer – Orange Mobile: +9198625 28123
36	Wakro, Arunachal	Abdul Aziz Representing Karimganj exporter	Buyer-Orange Mobile: +9194362 56242
37	Wakro, Arunachal	Faisal Islam Representing Karimganj exporter	Buyer – Orange
38	Wakro, Arunachal	Ramashankar Singh	Horticulture Development Officer, Wakro Mobile: +9194362 20841
39	Roing, Arunachal	Rangmin Sora	Horticulture Development Officer, Roing Mobile: +91087310 93731 +9194362 22429
40	Roing, Arunachal	Anil Sah On road conditions in Sadiya Dist	Grocery Shopkeeper @ Chapakhowa, Assam
41	Roing, Arunachal	Gebom Angu	District Horticulture Officer, Roing Mobile: +9194029 10192 roinghortiofficer@gmail.com
42	Roing, Arunachal	Dhanpal Singh	Horticulture Field Assistant/Grafter +9198629 42877
43	Roing, Arunachal	Raju Mitra	Editor, Roing Times +913803 223976 roingtimes@gmail.com
44	Roing, Arunachal	Dature Miuli	Farmer – Orange, Rubber, pomgrenate, Enritium Resort owner! Mobile: +9194360 48180 +91897947 62251
45	Roing, Arunachal	Umli Miuli Daughter of Dature Miuli PG from Amity, Bangalore	
46	Roing, Arunachal	Kachu Mele	Farmer, Orange, Pineapple, Medicinal Plants Mobile: +9194360 48160 Mobile: +9189747 62251
47	Roing, Arunachal	Jommy Mele	Farmer, Orange, Pineapple Mobile: +9194024 76944
48	Roing, Arunachal	Rome Mele	Mobile: +98560 32125

#	Location	Name	Status & contact details
		Son of Jommy Mele MBA from Symbiosys, Pune Bosch cutting tool dealer in Itanagar	Romele26@gmail.com
49	Roing, Arunachal	Jowar Moyang	Farmer-Ginger, Vegetables
50	Roing, Arunachal	Yu Pertin	Farmer – Ginger, Vegetables
51	Roing, Arunachal	Baktom Borang	Farmer –Ginger, Vegetables Mobile: +919612421979
52	Roing, Arunachal	Anggong Pertin	Farmer – Ginger, Vegetables
53	Roing, Arunachal	Israel Perme	Farmer – Ginger Mobile: +9198628 56531
54	Roing, Arunachal	Ate Tapo Ajango Village	Farmer – Arecanut, Orange Mobile: +9194362 08278
55	Roing, Arunachal	Chiliko Meto Chairman, Zilla Parishad	Farmer – Orange, Rubber Mobile: +9194360 48530 www.metochiliko.com metodebang@ymail.com
56	Roing, Arunachal	Gowri Shankar Representing Karimganj exporter	Buyer – Orange, pineapple Mobiile: +9173080 03775
57	Roing, Arunachal	Sanwal Representing Karimganj exporter	Buyer – Orange, pineapple Mobile: +9197066 15987
58	Ziro, Arunachal	Tage Tabio	Owner, Food Processing Unit Mobile: +9194368 94368 +9196154 84861
59	Roing, Arunachal	Mohamed Eqlas Uddin Ahmed	Buyer – Orange, pineapple Mobile: +91
60	Roing, Arunachal	AK Mohamed Eqlas Uddin Ahmed's nephew Representing Karimganj exporter	Buyer – Orange, pineapple Mobile: +9194351 96864
61	Pasighat, Arunachal	Belom Apum	District Horticulture Officer Mobile: +9194360 43424 +9196125 78290 Belom_06@yahoo.com
62	Pasighat, Arunachal	Ms I Ering	Horticulture Development Officer Mobile: +9194360 53139
63	Pasighat, Arunachal	K Kumar	Sub Divisional Horti Devt Officer Mobile: +9194360 53585
64	Roing, Arunachal	Somu Linggi Worked with Nabard under Tribal Devt Fund	NGO & ex DC, Roing Mobile: +9198624 45244
65	Roing, Arunachal	Naktong Lego	President, Roing Horticulture Society Mobile: +9196121 05285
66	Roing, Arunachal	Paritosh Debnath Second gen shopkeeper in Roing Bazaar (born & brought up in Arunachal)	Owner, Kimi Stores Mobile: +9198628 52628
67	Roing, Arunachal	Tamiyo Tatak	Asst Sub Inspector, Roing

#	Location	Name	Status & contact details
			Mobile: +919862161964
68	Roing, Arunachal	Anil Dorji On road/barge conditions	Driver, Roing
69	Roing, Arunachal	K Libang (insight into Arunachali mindset & poor infra)	Exe.Engineer, Pasighat Mobile: +9194024 11977
70	Pasighat, Arunachal	Oter Gao	Horticulture Development Officer Mobile: 9194360 43436 otergao@yahoo.com
71	Pasighat, Arunachal	Ms. Omeng Ering	Horticulture Development Officer-MDC
72	Pasighat, Arunachal	Tajum Tasang Boying Village	Farmer – Orange, Banana Mobile: +9196121 57743
73	Pasighat, Arunachal	Talem Tasang Tajum's uncle & sells through his produce through nephew	Farmer – Orange, pineapple Mobile: +9198631 48634
74	Pasighat, Arunachal	Oling Ering	Farmer – Orange etc.
75	Pasighat, Arunachal	Otik Tai	Farmer – Banana, Pineapple
76	Pasighat, Arunachal	Ms Omi Dai Siang Women Coop Society 15 members (floriculture)	Farmer – Anthuriam flowers Mobile: +9194360 53020
77	Pasighat, Arunachal	Ms Oti Sitang Eko	Farmer – Anthruiam flowers Mobile: +9198621 29129
78	Pasighat, Arunachal	Zafar Exports (MoU route for 2 years under NHM Technology Mission) Now MOU expired.	Mobile: +9199575 68802
79	Pasighat, Arunachal	Florence Flora (MoU route for 2 years under NHM Technology Mission) Now MOU expired.	Mobile: +9199575 81003
80	Pasighat, Arunachal	AMPI Currently selling Pasighat flowers in Itanagar	Mobile: 9194360 44262
81	Pasighat, Arunachal	Nekot Dai	Farmer – Floriculture Mobile: +9194368 38392
82	Pasighat, Arunachal	Kenpu Tongu	Farmer – Floriculture Mobile: +_9194360 43061
83	Pasighat, Arunachal	Jokud Modi Napit Village	Farmer – Orange, Balancia/Mosambi, Ginger, Pineapple, Vegetables Mobile: +9198621 67834
84	Pasighat, Arunachal	Tanyo Jerang Tekong Village	Farmer – Orange Mobile: +9198627 18167
85	Pasighat, Arunachal	Tolang Kemi Tekong Village	Farmer – Orange
86	Pasighat, Arunachal	Osi Taga	Horticulture Field Assistant, Pasighat
87	Pasighat, Arunachal	Abu Tayang Tekong Village Tanyo Jerang's relative	Farmer - Orange

#	Location	Name	Status & contact details
		Ex-serviceman 1962 China war	
88	Pangin, Arunachal	Taloka Darang	Farmer-Orange & Food Processing Unit Mobile: +9194362 50763
89	Pasighat, Arunachal	Dr Ajai K Pandey	Dean, College of Horticulture & Forestry, Pasighat Mobile: +9194360 53047 Pandey.ajai1@gmail.com
90	Pasighat, Arunachal	Dr Suresh Tiwari	Asst Professor, CHF, Pasighat Mobile: +9194366 35558 sureshCHF@gmail.com
91	Pasighat, Arunachal	Dr Sunil Kumar Singh	Floriculturist, CHF, Pasighat Mobile: +9194362 21758 Sunu159@yahoo.co.in
92	Pasighat, Arunachal	Dixu Tape (insight into HDO/HFA visits background)	Driver, DHO-Pasighat
93	Pasighat, Arunachal	Obang Tamak Rengingg Village	Farmer – Orange, large cardamom, ginger, turmeric Mobile: +9198625 81963
94	Pasighat, Arunachal	Badrul Haq Representing Karimganj exporter	Buyer – Orange, pineapple etc Mobile: +9194350 74934
95	Pasighat, Arunachal	Durga Paron Rengingg Village Representing Siliguri buyers	Buyer – Orange, pineapple, large cardamom Mobile: +9196121 65022
96	Pasighat, Arunachal	Krishna Ghosh Guwahati Works through Durga Paron (see above)	Buyer – Orange etc. Mobile: +9198642 47511
97	Pasighat, Arunachal	Ator Komut Yagrung Village	Farmer – Orange, pineapple
98	Sissen, Arunachal	Tajir Siram Sissen bastl	Farmer – Orange, Balancia/mosambi, ginger, pineapple, jatropha, large cardamom etc. Mobile: +9194360 91813
99	Sissen, Arunachal	Bami Koyu	Horticulture Development Officer- Pangin Mobile: +9194366 96536 Bamikoyo2012@gmail.com
100	Sissen, Arunachal	Bakin Siram Works with Tajir Siram group	Farmer- Orange etc.
101	Sissen, Arunachal	Talut Taki Works with Tajir Siram group	Farmer – Orange etc.
102	Sissen, Arunachla Pradesh	Taget Siram Works with Tajir Siram group	Farmer – Orange etc
103	Sissen, Arunachal	Tajing Tamuk Works with Tajir Siram	Farmer – Orange etc.

#	Location	Name	Status & contact details
		group	
104	Sissen, Arunachal	Tamin Tamuk Works with Tajir Siram group	Farmer – Orange
105	Sissen, Arunachal	Tayin Taki Works with Tajir Siram group	Farmer – Orange
106	Pangin, Arunachal	Takar Dupak	Farmer – Orange, Balancia, turmeric Mobile: +9194026 27642
107	Pangin, Arunachal	Tatar Darang Anchal Sarati Member	Farmer – Orange, pineapple, veg Mobile: +9194022 50460
108	Pangin, Arunachal	Tagum Sitang Beneficiary of Drying system from state horti dept.	Farmer – Orange, large cardamom, turmeric Mobile: +9194368 39039
109	Pangin, Arunachal	Mr Tapang Taloh Minister for Industries & Handloom Govt of Arunachal MLA from Pangin	Met him twice over extended discussion on food processing, power, road scenario. Invited to his home for a reception & asked to give a talk to 20 farmer-visitors at his residence.
110	Aalo, Arunachal	Tareng Taga Greengold Agro Environmental Alliance (NGO) Beneficiary of large cardamom dryer (2 nos) Chairman, 600 farmers coop.	Farmer – orange, turmeric, ginger etc. Mobile: +9194364 15516 tarangtaga@gmail.com IMPRESSIVE FARMER
111	Aalo, Arunachal	Tamu Jerang Secy- NGO, Greengold	Farmer – orange, turmeric etc. Mobile: +9194360 96879
112	Aalo, Arunachal	Deepak Agarwal Transporter/ Works with Tarang Taga	Transporter Mobile: +9194351 99697
113	Aalo, Arunachal	Limar Bagra Representing Karimgang exporter	Buyer – Orange etc.
114	Aalo, Arunachal	Tabong Talmut Tatas hired him @ 7,000/month for 3 months to collect farmers data! But works for Tarang Taga	Field Assistant at Tarang Taga farms Mobile: 9194024 99889
115	Aalo, Arunachal	Mrs. Dunyu Rte (Dirchi)	Horticulture Development Officer, Aalo Mobile: +9194366 38130
116	Aalo, Arunachal	Ram Singh	Sub Divsional Development Officer, Aalo Mobile: +9194360 58239
117	Aalo, Arunachal	Karyom Doji	District Horticulture Officer Mobile: +9194360 56076 karyomdoji@yahoo.com
118	Aalo, Arunachal	T Partin	Asst. Dir-Industry

#	Location	Name	Status & contact details
			Govt of Arunachal, Aalo Mobile: +9194366 30901
119	Aalo, Arunachal	T S C Singh (senior and good source of info)	Office In Charge, Aalo Mobile: +9194362 12412
120	Aalo, Arunachal	Henrik Basar	Horticulture Development Officer Mobile: +9194360 45768 Henrikbasar@rediffmail.com
121	Aalo, Arunachal	Bomge Bagra Bagra village	Farmer – Pineapple Mobile: +9194362 72519
122	Aalo, Arunachal	Jumdo Bagra Bagra village	Farmer – Pineapple, orange Mobile: +9194024 69228
123	Aalo, Arunachal	Doi Ado Ex-Minister, Chairman of Siang Farmers Club) Beneficiary of dryer for large cardamom	Farmer – Orange, large cardamom etc.
124	Aalo, Arunachal	Dr Avir Bhaw, Delhi (facilitator of organic certificate!)	Doi Ado's contact Mobile: +9198734 98928 avirbhaw@gmail.com
125	Itanagar, Arunachal	Mr Narang Tani	Dy Director – Marketing Horticulture Department Govt of Arunachal arunachalhorticulture@yahoo.in Mobile: +919436045034
126	Itanagar, Arunachal	Mr Hage Kojleen	Commissioner-Agri & Horticulture Govt of Arunachal Hage_kojleen@rediffmail.com Mobile: +919436898989
127	Itanagar, Arunachal	Ronya Dego	Horticulture Marketing Officer Govt of Arunachal Mobile: +919436255885 Degoronya01@gmail.com
128	Ziro, Arunachal	Bhumepoon (insight into Ziro-Itanagar highway)	Driver-HDO/Ziro Mobile: +9198565 51444
129	Ziro, Arunachal	Ramana Mohanty	Highways Supervisor (SRK co) Mobile: +9187309 99936 +9194419 44435
130	Ziro, Arunachal	Shankar Borah	AMW Driver (SRK Co) Mobile: +9173999 53236
131	Ziro, Arunachal	Bullo Tama	District Horticulture Officer Mobile: +9194362 51930
132	Ziro, Arunachal	Hage Kago	District Informatics Officer Mobile: +9194360 51867
133	Ziro, Arunachal	Kuru Ama	Horticulture Development Officer Mobile: +9194366 39713
134	Ziro, Arunachal	Kalung Bida Secy, Kiwi Growers Club, Lower Subasiri District	Farmer-Kiwi, Large cardamom Mobile: +9194360 afs.ziro@gmail.com
135	Ziro, Arunachal	Lika Saya MLA	Parliamentary Secy-Agri/Horti Govt of Arunachal Mobile: +9198101 17159

#	Location	Name	Status & contact details
136	Ziro, Arunachal	Gyati Ateo	Farmer-Kiwi Mobile: +9194360 47406
137	Ziro, Arunachal	Taku Chatung	Farmer-Kiwi Mobile: +9194362 27269 tbchatung@yahoo.com
138	Ziro, Arunachal	Gyati Loder	Farmer – Kiwi Mobile: +919436897898
139	Itanagar, Arunachal	Lika Tamin	Buyer for local market Mobile: +9198628 88093
140	Itanagar, Arunachal	Jombo Ratan	Director-Horticulture Govt of Arunachal Mobile: +9194360 41740 +9194360 44976
141	Guwahati, Assam	S Bhattacharji	Managing Director NERAMAC Mobile: +9197060 98131 md.neramac@gmail.com
142	Bomdila, Arunachal	Kewalanand Tiwari	Horticulture Marketing Officer Mobile: +9194362 23503
143	Bomdila, Arunachal	Ngoichung Phoichulpa	District Horticulture Officer Mobile:
144	Bomdila, Arunachal	Bodumba Monpa	Farmer – Apple, Kiwi & nursery Mobile: +9194362 25150 +913780200204/5
145	Bomdila, Arunachal	B R Singh	Fieldman (HFA) Mobile: +9194362 54877
146	Bomdila, Arunachal	Dorji Leto Bodumba's son IMPRESSIVE FARMER	Govt Servant & Farmer-Kiwi, Apple Mobile: +9194366 35226 letojantsenpa@yahoo.com
147	Dirang, Arunachal	Gompu Monpa	Farmer – Kiwi Mobile: +9194362 29729
148	Dirang, Arunachal	Dr D P Singh	Dy Dir & Horticulturist Govt of Arunachal Mobile: +91
149	Rupa, Arunachal	Tsering Gyirme Ex-Minister	Farmer & Chief Patron, Rupa Farmers Club Mobile: +9194362 58742
150	Rupa, Arunachal	Nmit Hongchi	President, Rupa Farmers Club Farmers
151	Rupa, Arunachal	R N Musabi	Farmer & Rupa Farmers Club Mobile: +9194364 07126
152	Rupa, Arunachal	Nangdi Karma Shertukpen	Farmer & Rupa Farmers Club Mobile: +9194020 43818
153	Rupa, Arunachal	G P Dubey	District Horticulture Officer & Horticulturist Apple Research Station, Shergaon Mobile: +9194024 77646 g.p.dubey11@gmail.com
154	Rupa, Arunachal	Rinchin Dorji Wangja village	Farmer-Roses Abandoned polyhouse, funded by NHM due to lack of marketing on his own!!!!
155	Shergon, Arunachal	Tsering Dhunpok	Farmer – Kiwi

#	Location	Name	Status & contact details
		Apex bank	Mobile: +919436068269
156	Shergaon, Arunachal	Anup K Srivastava	Horticulture Field Assistant Mobile: +9194020 11300
157	Shergaon, Arunachal	J P Roy	Horticulture Field Assistant Mobile: +9194026 13591
158	Bomdila, Arunachal	Yeshe Tsering	Jt Dir-Horticulture (temperate zone) Govt of Arunachal Mobile: +9194360 45042
159	Bomdila, Arunachal	Hibu Dante	Horticulture Development Officer Mobile: +919436048443
160	Guwahati, Assam	K C S Kurup	GM-Marketing Neramac kcskurup@gmail.com Mobile: +9197060 98141
161	Guwahati, Assam	Timuti Dass Hanse	Director-Horticulture Govt of Assam Mobile: +919435508000
162	Guwahati, Assam	S P Singh	Secy, Motor Owners Assn, Tinsukia Mobile: +9197062 57644
163	Guwahati, Assam	Sunil Sharma	Branch Manager Mercurio Pallia Logistics Mobile: +9194355 52128
164	Guwahati, Assam	Pradip Das	Secy General Guwahati Transport Assn Mobile: +9198640 64385
165	Guwahati, Assam	Sanjay Jhanu	Branch Head, Gati Ltd Mobile: +9199571 98363
166	Guwahati, Assam	Bedabrata Bordoloi	Regional Manager Hyundai Motors Mobile: +9199541 50050
167	Guwahati, Assam	B R Baruah	GM-Fin & Accts Neramac Mobile: +9197060 98135
168	Guwahati, Assam	A B Angadi	Sr Marketing Manager Neramac Mobile: +9194355 49336
169	Guwahati, Assam	B J Brahma	Dy Dir- Regional Office Spice Board Mobile: +9194350 19767
170	Guwahati, Assam	D B Barman	Senior Field Officer Jorhat @ Agri University Mobile: +9194361 27279
171	Guwahati, Assam	M M Roy	Joint Dir - Horticulture Govt of Assam Mobile: +9194351 21126 dirhortiassam@gmail.com
172	Guwahati, Assam	N K Sharma	Dy Dir - Horticulture Govt of Assam Mobile: +9198540 94250
173	Guwahati, Assam	M D Bharali	Agriculture Development Officer Govt of Assam Mobile: +9194351 00265

#	Location	Name	Status & contact details
174	Guwahati, Assam	Dhiren Sharma	Dy CEO Assam State Agri Mkg Board Mobile: +9194353 01654 dceoasmb@gmail.com
175	Guwahati, Assam	Bul Bul Hussein	Executive Engineer Assam State Agri Mkg Board Mobile: +9435016456
176	Guwahati, Assam	Pintoo Malik	Machine Operator Singimary Cold Storage
177	Guwahati, Assam	Kamlesh Rana	Owner Singimary Cold Storage Mobile: +9198640 13800
178	Guwahati, Assam	Sanjiv Saikia	In Charge Reliable Cold Storage, Sangsari, Kamrup Rural Mobile: +9196788 00136
179	Guwahati, Assam	Bini Lohia	Managing Director Reliance Cold Storage, Sangsari Kamrup Rural Mobile: +9198540 41107
180	Guwahati, Assam	R K Behra	Dy GM-Nabard Mobile: 0361 2238007/8 Rk.behera@nabard.org
181	Guwahati, Assam	Dr Sarat Saikia	Chief Scientist Horticultural Research Society Assam Agri University, Kahihuchi Mobile: +9194352 24593 Sarat_hort@rediffmail.com
182	Guwahati, Assam	Manabjyoti Dass	SFAC Regional Centre Mobile: +9194351 00426 Mjdas10@gmail.com
183	Guwahati, Assam	Vinod K Bist	Nabard Mobile: +9194350 09086 bistvk@yahoo.co.in
184	Guwahati, Assam	Ms Nabneeta	Officer NHB Regional Office Mobile: +9198642 61389
185	Guwahati, Assam	Pradeep Bhuyan	Asst Mkg Officer Neramac Mobile: +9197060 98142 pradeepbhuyan@rediffmail.com neramac.zo.assam@gmail.com
186	Guwahati, Assam	Paul Muktieh	Chairman & MD North East Devt Financial Institution Mobile: +9198540 81203 Bp.muktieh@nedfi.com
187	Guwahati, Assam	Sunsharma Hazarika	Logistics Head Hyundai Motors India Ltd Mobile: +91 98649 81483 sunsharma@hml.net
188	Guwahati, Assam	Bharat Yadav	Driver (Car carrier fm Guwahati- Tinsukia) Mobile: +9198527 47121

#	Location	Name	Status & contact details
189	Nangaon, Assam	Abdul Jafar Rangagora village	Labour Contractor/Transport arranger for local farmers to send fresh veg to big markets from Rangagora village
190	Nangaon, Assam	Pranab Chakroborty Rangagora village	Pharmacy owner & local farmer of vegetables Mobile: +9190859 51088
191	Nangaon, Assam	Devendra Kumar Rai Rangagora Village	NRL PumpIncharge Mobile: +9198541 57172
192	Nangaon, Assam	Monjyoti Sharma Rangagora village	ITI trained electrician & farmer Mobile: +9197063 84753
193	Tinsukia, Assam	Rohini Gogoi	District Agriculture Officer distagritsk@gmail.com Mobile: +9194353 91155
194	Itanagar, Arunachal	Mardo Ninu	Department of Horticulture Govt of Arunachal Mardo5454@gmail.com Mobile: +919436056182
195	Tinsukia, Assam	Hulas Chand Jain	Owner Mahabir Cold Storage Mobile: +9194350 35087 Mcspl45@yahoo.com
196	Guwahati, Assam	Shankar Chanda Dutta	Horti Department Govt of Assam Mobile: +9197070 22584 Sankarch.dutta@gmail.com
197	Guwahati, Assam	Shaahabuddin Ahmed	Engineer Assam State Agri Mkg Board Moblie: +9194350 87204 Shahbuddinahmed46@yahoo.in
198	Guwahati, Assam	Hemanta Kalita	Horti Department Govt of Assam Mobile: +9198540 51055
199	Tinsukia, Assam	Turakanta Hati Barooah Habedagaon	Farmer- vegetables Moblie: +919613984338
200	Tinsukia, Assam	Prafulla Moran	Farmer – vegetables
201	Tinsukia, Assam	Jitu Moran Son of Prafulla (see above)	President Lakshmi Farmers Mgt Group Mobile: +9199542 05402
202	Tinsukia, Assam	Bhobeswar Mech	Secy Lakshmi Farmers Mgt Group Mobile: +9196789 69864
203	Tinsukia, Assam	Sanjay Sah	Manager Greenfield Cold Storage Mobile: +9194357 45883
204	Tinsukia, Assam	Ram Niwas Agarwal	Owner Greenfield Cold Storage Mobile: +9194350 35639
205	Itanagar, Arunachal	A K Purkayastha	Director-Marketing Arunachal Agri Produce Mkg Bd Mobile: +9194360 43115 +9196121 59494
206	Tinsukia, Assam	Nagendra Nath Neog	Farmer-orange & vegetables

#	Location	Name	Status & contact details
		Tamuli bongaon village	Secy, Tamulibongaon FMG Mobile: +9196134 57914
207	Tinsukia, Assam	Robin Saikia Village Mukhya	Farmer – orange, passion fruit, vegetables, bamboo
208	Tinsukia, Assam	Tejpal Khandelwal	Owner Karnikara Cold Storage Mobile: +9194350 37070
209	Tinsukia, Assam	Yubaraj Sarma	Manager Karnikara Cold Storage Mobile: +9196787 06946
210	Tinsukia, Assam	Pinkoo Sinha	Technical Manager Karnikara Cold Storage Mobile: +9199549 19644
211	Tinsukia, Assam	Rubul Gohain	District Agriculture Officer Mobile: +9184868 57373
212	Roing, Arunachal	Dr Ista Pulu Gynaecologist @ District Hospital	Farmer – Oranges, ginger

Contact Telephone numbers and email addresses have been listed where available and offered.

Audio Archive

Almost all interactions were conducted with a live RECORDING.

Several other interactions at farmgates were also done in RECORDED mode, but due to paucity of time to listen to the entire taped conversation running to more than 10 hours, some of these interviewees have been left out.

These unedited RECORDINGS are available with Shri Ramesh Kumar.

On the whole, the trip was an eye opener regarding recent development initiatives wherein connectivity and long term vision for a progressive road map.

Yet, while the improvement is evident across roadways, rail, capacity building and others, there was limited evidence of business application to promote local entrepreneurship and promote agri-trade with remote markets.

Record of Interactions

Record of Communications during the Tour