

Ministry of Agriculture
Department of Agriculture & Cooperation



Committee on Supply Chain & Logistics

For Post Harvest Marketing

Report on Activities by the Committee

August 2012 to December 2013

List of Contents

	... page number
1. Executive Summary of activity report. <i>Highlighted points</i>	... 3
2. List of Committee Members. <i>Members constituting the committee</i>	... 4
3. Minutes of first meeting. <i>Recommendations recorded, decision to invite members</i>	... 5-8
4. Invitation Letter to participate as committee member. <i>Sample letter to invite participation</i>	... 9
5. Concept note on committee. <i>Concept note attached to invitation letters.</i>	... 10-14
6. Minutes of meetings two to four. <i>Record of meetings held</i>	... 15-22
7. Query form for use at Cold storages visited in NE. <i>Questionnaire by NCCD for use during study tour to North east</i>	... 23-25
8. North East Study Tour (part 1): Tour Record. <i>Tour record of tour to Assam, Arunachal Pradesh and Meghalaya</i>	... 26-82
9. Images from the NE Study Tour. <i>Selected images of meetings and cold stores visited</i>	... 82-113
10. Status of NCCD Reefer Vehicle Redressal Centre. <i>Preliminary Concept and status of NCCD RVRC project</i>	... 114-130

Executive Summary:

- The committee recommended a base line survey of existing cold chain capacity created in the country, for effective information for more relevant & effective functioning of NCCD. This recommendation was accepted by the Department of Agriculture and Cooperation, initiating the first nationwide base line survey of cold storages created and available to public on lease. This study commenced in February 2013 under technical leadership & support of National Horticulture Board.
- The committee undertook a study tour of North Eastern states through one of its members, the first from 29-October to 2-December 2012. The objectives of this tour were to get first hand exposure on infrastructure connectivity and human capacity in the states visited. This was followed-up with workshops in Meghalaya (November 2013), Assam (December 2013) and Arunachal Pradesh (January 2014). The tour report was highlighted in the States of Meghalaya and Arunachal Pradesh and extracts were released in a publication Citizen Diary by Meghalaya.
- The committee considered the need to assess the low development and the concerns faced by the critically deficient link of reefer transport. NCCD thereafter held a special conclave on bottlenecks faced by refrigerated transport (Air, Sea, Road, Rail). This initiative was a first focussed on transport segment and well attended. A white paper report on the same was published in partnership with E&Y. Recommendations were provided to department.
- The committee discussed the lack of a fast track corridor for perishables. Critique was expressed on the fact that the perishable nature of cargo is assigned no special status at interstate roads and checkpoints causing various delays. NCCD has since proposed & developed a Reefer Redressal call in Centre to document and assess the delays and challenges on highways. This project is pending implementation.
- The committee invited guests to attend – including a Swiss investor from one of the oldest logistics companies (Gondrad) in Europe for members to interact and assess the perception of foreign investors in India's cold-chain sector.
- The committee raised concerns on the lack of industry level key performance metrics for cold-chain and on lack of standardized processes and handoffs between stakeholders in the supply chain. A task force to work on these matters would be required for follow-up.
- The committee convened meetings on four occasions every month from Aug 2012 to November 2012. Minutes from each meeting are enclosed. The committee has continued to interact offline in following up on discussions.
- The committee has not submitted any costs to NCCD and has functioned ex-gratis at convenience.

Members of NCCD's national Committee on Supply chain and Logistics for Post-harvest marketing

<p>1. Pawanexh Kohli (Chairman)</p> <p>Chief Advisor & CEO NCCD</p>	
<p>2. Atul Khanna –</p> <p>Director (India), Global Cold-chain Alliance (GCCA) USA, co-chair.</p>	
<p>3. Ashok Mirchandani –</p> <p>Managing Director Asia-Pacific, Carrier Transicold.</p>	
<p>4. Gopal V. K. Gopalkrishnan –</p> <p>Global Practice Leader & Vice President Genpact.</p>	
<p>5. Ramesh Kumar –</p> <p>Publisher Editor, Author Supply chain India.</p>	
<p>6. Anil Arora –</p> <p>Managing Director, MJ Logistics.</p>	
<p>7. Amitabha Chaudhuri –</p> <p>Managing Director, APL Indialinx.</p>	
<p>8. Ravi Kiran Malik –</p> <p>Deputy General Manager, NABARD.</p>	

Enclosures follow...

Committee for Supply Chain & Logistics for Post Harvest Marketing
National Centre for Cold-chain Development
[A govt of India initiative]

Reference: M1-0812-SCLPHM

Date: 14-Aug-2012

Subject: First Meeting of Committee (SCLPHM)

Date of Meeting: 13-Aug-2012

Venue: Office of Co-Chair, GCCA, Nizamuddin, New Delhi

Attendees:

1. Capt. Pawanexh Kohli (Chairman)
2. Mr. Atul Khanna (Co-Chairman)

Minutes of Meeting:

1. Meeting was convened at 1330 hours, there were no previous meetings for discussion.
2. The concept note for the committee and its aims and objectives were read out.
3. It was suggested that function at primary level, as a first the committee should aim at following:
 - a. Assess existing supply chain infrastructure availability in the country, which serves as or can be usable as future links for an integrated supply line.
 - b. Take inputs from service providers and equipment suppliers with focus on failures and technology considerations that impact supply chain and logistics.
 - c. Table measurable performance metrics of current logistics activities.
 - d. Finalise a list of factors that inhibit supply chain businesses through existing infrastructure.
4. Chair proposed that in line with the stipulated objectives of the committee, relevant members be invited to participate in the SCLPHM deliberations. This was seconded by Co-Chair.
5. A preliminary list of sectors from which persons to be invited as members was drawn out, namely:
 - a. Logistics service providers.
 - b. Process management IT sector.
 - c. Technology providers.
 - d. Financial or investing institutions.
 - e. Producer owner sector.
 - f. Marketing sector.
 - g. Pharmaceutical or allied cold chain sector.
 - h. Media publicity sector.
6. Members identification would be initiated and prospective members would be approached during Cold chain Summit in end August.
7. Executive council to be appraised of plan to extend quorum of committee after initial interests received from prospective members.

8. To assess existing infrastructure as tools available to the supply chain domain, support in form of field survey, complete or partial, to be recommended to executive committee. Said recommendation to be appended as submission of this meeting report.
9. Next meeting to be held in month of September at a mutually suitable date, preferably before third week.
10. Meeting was closed at 1500 hrs.

Approvals sought from Committee:

1. To extend the quorum of the committee by inducting members willing to participate in the stated developmental activity.



(Pawanesh Kohli)
Committee Chairman

Attached:
Appendix 1 – Recommendations from Committee.

Committee for Supply Chain & Logistics for Post Harvest Marketing

Appendix 1 – Recommendations

Reference: M1-0812-SCLPHM

Date: 14-Aug-2012

Recommended next steps by Committee:

NCCD to conduct or facilitate a nationwide survey to assess existing post harvest marketing infrastructure.

- These surveys to be devised so as to lead to analysis of following aspects:
 1. Assess viability gap in supply chain and reasons thereof – location, technology, commercial model, agricultural patterns, etc. This will lead to developing interventions suited to resolving the viability concern.
 2. Assess possible technology deployment for measuring flow of cargo through infrastructure which could allow these to function as subsets to APMC.
 3. Assess aging and subsequent demand gap (in advance) for infrastructure especially in case of trucks, so as to proactively promote development prior to shortages developing.
 4. Assess total impact of benefits (service tax, others), when formulating policy. This would also allow scope to develop differential benefits between agri-produce and other cargos.
 5. Assess possible mapping and networking of cold storage capacity for contingency deployment and monitor pan-national flow & market reach of produce.
 6. Assess interstate vehicular movement and type for scoping of multi-modal options and develop lead towards Grid Corridor for perishables.
 7. Assess marketing links and develop promotional intervention to link farm produce marketing organizations (kirana shops) to FPOs and cold storages as marketing hubs.
 8. Added assessments that will facilitate the other technical committees formed (Standards, Quality, HRD, Technology, etc).
- Cold storages:
 - a. **Usable volumetric Capacity**
 - a. **Design Capacity:** The study should indicate the numbers of cold stores with designed capacity exist, both in public and private sector, which are available to public lease by region and by stated design capacity.
 - b. **Utility:** The study should indicate the temperature zone / compartment type in each cold store to form basis of usability matrix.
 - c. **Functionality:** The study should indicate the details of cooling infrastructure installed at each cold storage including insulation, docks and doors.
 - d. **Usability:** The study should indicate the declared capacity types in use of each cold storage viz actual capacity utilisation. To also capture data on type of goods/cargo stored over a sample period of previous year.
 - e. **Others:** The study should indicate the other facility provisions including packing, pre-cooling and transport shelters associated with each cold store.
 - b. **Technical Assessment**
 - a. The study should indicate Age of facility and details of whether the declared utility matches the functionality on site. This would require assessment of insulation, refrigeration basis produce/goods/cargo suitability.

- c. Human Resources Development**
 - a. The study should indicate the details of any training programmes participated in or organised for cold storage operators by the facility. The level of awareness generated among its operators after training/exposure visits also to be indicated.
- d. Post Harvest Management**
 - a. The study should indicate if any post harvest management is undertaken by the facility directly or indirectly. This should also achieve to indicate if cold storage is working as a standalone operation or if business model indicates a solution based function.
- e. Marketing Assessment**
 - a. The study should indicate the marketing procedures undertaken by the cold storage facility if any.
- f. Power consumption/management**
 - a. The study should indicate the power utility for each cold store as well as power source categorisation. A ratio between capacity utilisation and power consumed is to be derived.
- g. Resources Assessment**
 - a. The study should indicate the existing operational resources as required to operate the cold storage to declared status, including energy, spares and redundancy safe guards.
- h. Commercial Assessment**
 - a. The study should indicate changes in the past and existing capacity utilisation and cargo type of each cold store as declared by the owner/managers. Whether record keeping manual or digitised.
- i. Accessibility Assessment**
 - a. The study should indicate the accessibility (rail/road infrastructure) to the facility surveyed including closest highway and approximate distance.
- j. Ownership Structure**
 - a. The study should indicate the ownership structure of the facility as well as total capacity and locations under same ownership.
- k. Scheme participation**
 - a. The study should indicate if any government Scheme was utilised to build the infrastructure.
- l. Association and affiliations**
 - a. The study should indicate any membership to industry association or similar affiliations by the cold storage including any to safety and agriculture/ horticulture standards of operations.
- **Reefer Trucks/Containers:**
 - i. Size of vehicle reefer chamber.
 - ii. Equipment capacity and type.
 - iii. Age of vehicle.
 - iv. Age of reefer plant.
 - v. Type and specification of insulation.
 - vi. Power source (Independent diesel drive, direct axle drive)
 - vii. Type of permit (National, Regional)
 - viii. Service affiliations.
 - ix. Tracking and tracing technology deployed (GPS, Temp/RH monitoring)

**Invitation to Participate in
National Committee on Supply Chain & Logistics
National Centre for Cold-chain Development**

Dear

NCCD: Committee on Supply Chain & Logistics (CSCL) for Post Harvest Marketing

I am pleased to inform you that I have been requested by the Director of NCCD, Mr. Shailendra Kumar to constitute and chair the Committee on Supply Chain & Logistics for Post Harvest Marketing, which I have accepted.

NCCD (National Centre for Cold-chain Development) is a Govt of India initiative and established to serve as the nodal body focused on developing cold chain in the country. As the umbrella body it shall be involved in setting standards, protocols, quality norms, capacity building and inter alia on related matters of policy.

The committee on supply chain and logistics has set its Vision in line with NCCD's objectives, to develop and recommend policy interventions and for facilitating the setting up of integrated Cold Supply Chains in the country focused not only on horticulture but all other cold chain cargos. A copy of the concept note of the committee (CSCL) is attached for your perusal.

I am writing to cordially invite you to join this Committee as a Member. Your participation in this National Level Committee will be of great value to NCCD as well as to me and I will greatly count on your support and involvement in carrying forwarding the agenda.

The Committee (CSCL) essentially intends to meet 4 times in a year and interact more frequently by other suitable means of communication. Myself and the NCCD Secretariat will keep in touch with you on a regular basis and keep you advised of the date of next meeting (which would tentatively be sometime in October 2012).

I do hope you would accept our invitation and look forward to your confirmation.

Best regards,

Aug-2012

Capt. Pawanexh Kohli
Chairman, Committee on Supply Chain & Logistics
(for Post Harvest Marketing)

Department of Agriculture & Cooperation
Ministry of Agriculture



**Committee on Supply
Chain & Logistics**
For Post Harvest Marketing

Concept Note

MAY 2012

Cold Supply Chain & Agri-Marketing

BACKGROUND

Despite repeated and renewed focus on agri-produce marketing, including cold chain facilitation, the nation has yet to witness fully the associated improvements and market confidence translating into cohesive growth. The cold chain received increasing focus and was often touted as the game changer – in bringing benefits to both end-consumer and farmer producer. Yet, despite gathering immense interest from all segments, it too struggles to reach expected realisation. A revisit of past focus is an obvious conclusion.

One of the benefits from attention generated on the cold chain, was extensive participation from various knowledge centres and institutions as well as frequent exchanges and interactions with individuals having hands on operational experience. Such sustained experience mostly stemmed from outside India, as our own cold chain was not developed sufficiently to attract & extend into an indigenous knowledge bank.

From such discussions and debates, one highlighted feedback is about the very concept of the “cold chain”. In what is actually the “cold supply chain”, the word ‘supply’ had taken a back seat in usage as well as in actual interpretation. In India, the cold chain tended to focus largely on necessary enabling equipment, its standards and specifications, its energy consumptions and possible innovations. Yet, the end intention of all such utility was to sustain an efficient Supply Chain that linked the rural farm to the urban fork.

Many a time, it is reported that despite all technical criteria & parameters having been adhered to, the produce output failed to meet expectations in market yield as well as quality terms. This led to subsequent debate on the types of the technology deployed; the ‘cold chain’ would react defensively with equipment arbitrage and revisiting of standards, whereas the base utility of ‘supply under appropriate care’ was not fully evaluated.

Various discussions on such concerns indicate that the entire focus had shifted away from the efficacy of the Supply Chain onto the efficacy of the equipment. As a result, the moot point of having an integrated supply chain was over shadowed in technicalities of machines & equipment. This also resulted in wrongful blame being assigned to equipment suppliers. The reality it seems is that supply chain ownership was not partaking & remained silent.

The CII National Task Force underwent various conceptual changes also, as it deliberated these matters, as also its membership pattern evolved to be more inclusive. The formative NCCD is also intended to reflect development of the cold supply chain with inputs from all stakeholders – service user, equipment supplier, produce owner & supply chain manager. To date supply chain companies have not participated wholly in such developments.

It is well appreciated that the cold chain is not and cannot be limited to temperature controlled storage or its similar reefer transport technologies, but requires all-inclusive cold supply chain management at its core.

Supply chain involvement becomes even more significant since it can best evaluate the technology utility against market requirement. The managed cold supply chain necessitates incorporating various changes in sourcing, packaging, handling, inventory tracking & retail with associated cargo knowledge. An integrated, inclusive & holistic focus helps drive all enabling components which comprise a networked and efficient cold supply chain.

It is therefore proposed that a Committee on Supply Chain & Logistics for agri-produce be formulated to assist in the overall development of the cold chain as well as the existing supply chain of farm produce.

VISION

To facilitate implementation of the policy of the Govt. of India / Ministry of Agriculture with focus to promote holistic **integration in the supply chain** which incorporates components of cold chain technologies, non-cold chain options, hybrid options to aid the foremost aim of **enhanced market reach & realisation of agri-produce** & in synergy with other cargos.

Aims / Objectives

For purposes of the Committee, the “supply chain” refers broadly to the combination of goods, services and technology related to supply chain operations. The committee would represent the supply chain sector in advising on the development and administration of programs and policies to expand the competitiveness of the agri-business supply chains. The Committee shall provide market centric advice, information, and recommendations regarding:

1. Factors (national & local) that inhibit the efficient domestic and international movement of goods from point of origin to destination, and the competitiveness of domestic and international supply chains;
2. Developing participatory leadership which encompasses economic, social, technical, environmental and legal aspects necessary to bring about integrations across stake holders in the total supply chain;
3. Promotion of bipolar understanding of supply chain technology and its viable applications, serving to link the cold chain industry providers with cold supply chain managers & users;
4. Infrastructure network, cross-modal connectivity, investment, regulatory, and intra-governmental coordination factors that affect supply chain sustainability;
5. Supply Chain failures and considerations that impact upon technologies & their viability when developing an agri-produce supply line to the markets;
6. Metrics that can be used to quantify supply chain performance;
7. Relating technologies with supply chain processes which bind the various links in the agri-produce supply & marketing chain; and
8. Coordination of Supply Chain Initiatives with industry initiatives undertaken by other agencies to build coactions between operators & managers.

Activities

The suggested activities by the Committee are as follows. These are keeping in mind its current intended format as solely an advisory council on SCM matters.

1. To invite collaborative involvement & inputs from supply chain business stakeholders on prevailing policies and guidelines.
2. To highlight contemporary issues in supply chain areas of retail inventory management, logistics services and marketing, including changes to packaging, retailing, pricing and operations.
3. To provide inputs from SCM sector on options to offset technology deployment costs through other initiatives or policy intervention in the supply chain process.

4. To promote participation & provide recommendations from a supply chain domain perspective, for existing HRD and capacity building initiatives/undertakings.
5. To promote and to provide supply chain viewpoints, interactions with NCCD during development of standards & protocols for cold chain infrastructure.
6. To seek innovative models from the supply chain domain to network existing individual infrastructure to develop an integrated chain from farm to fork.
7. To invite focus on selection, evaluation and management of conflicts across various supply chain channels.
8. To recommend Pilot Projects from Farm to Fork,
 - a. For testing best practises as formulated by other agencies.
 - b. As a field testing lab for new equipments & protocols developed.
 - c. To assess guidance for hands on training on the entire supply chain.
 - d. For selected and direct trials of new supply chain innovative ideas.
9. To provide inputs as supply chain stakeholder to assist in R&D undertakings.
10. To provide participation in publicity & awareness campaigns aimed to educate the stakeholders.
11. To seek & recommend strategic inputs with a supply chain domain outlook to assist in policy assessments & future formulations including on National Green Grid for perishables.
12. To liaise with other Advisory Committees & Councils on Supply Chain Management, domestic & international.

All activities shall be so as to involve the integration of supply chain from source to market, bringing to fore the supply chain perspective and to allow scope to participate as mainstay users of technology and infrastructure.

Keeping these aims and activities in perspective, it is proposed that the members of the committee would preferably be individuals with established leadership experience spread across cold chain, supply chain, business process, knowledge process, logistics, distribution & transportation, agri-produce retail, shipping and infrastructure, with global exposures.

Management

For this Committee on Supply Chain and Logistics, it is intended to invite individuals with professional experience from the Supply Chain sector to enrol as members in the committee. The Committee shall be governed by NHM, Department of Agriculture & Cooperation. Members shall serve at the pleasure of the Joint Secretary/Director (NHM) from the date of appointment to the committee to the date on which the committee's charter terminates (normally two years).

The Joint Secretary/Director shall designate the Committee Chair and Vice Chair from selections made from the members. The Chair and Vice Chair will serve in those positions at the pleasure of the Joint Secretary/Director (NHM).

The Committee, to the extent practicable, shall meet as necessary, but not less than twice per year. No quorum is required. Additional meetings may be called at the discretion of the Joint Secretary/Director (NHM).

The Committee's management shall recommend other membership requirements as needed to service as one of the external support groups to NHM.

Beneficiaries and Impacts

The committee would provide a platform for interpretation of existing policies from the supply chain business managers' perspective. This should provide options for dynamic adaptation to realistic models, in spirit of the true intent of the government initiatives.

The Logistics and Supply Chain organisations have frequently sought recognition as an industry. This committee would provide interface for proactive dialogue in matters with food supply chain & logistics.

The committee would provide added inputs through user base for future policy amendments and introductions. Current organisations are leanly populated by the integrated supply chain user. The committee would felicitate active participation as well as facilitate new ideas.

The committee would help bring together policy makers, thought leaders, enterprises and entrepreneurs through participation of SME and existing agri-marketing businesses. In doing so the committee would provide medium for supply chain & logistics industry to Present a participative public and private face of government and business enterprises in driving an efficient and sustainable agri-marketing supply chain.

Provide participation to the stakeholders in the total supply chain. Besides stakeholders developing the infrastructure this committee should seek to impact upon the packaging, retailing and integrated logistics participants and the associated knowledge banks.

Provide avenue for recommendations in supply chain processes and interventions so as to offset capital outlays required.

The recipients of this communication are requested to revert with their further suggestions towards forming a Committee on Supply Chain & Logistics. Your suggestions shall be welcome and will be constructive towards establishing this committee.

Committee for Supply Chain & Logistics for Post Harvest Marketing

National Centre for Cold-chain Development

[A govt of India initiative]

Reference: M2-0912-SCLPHM

Date: 13-Sept-2012

Subject: Meeting of Committee (SCLPHM)

Date of Meeting: 12-Sept-2012

Venue: Office of Co-Chair, GCCA, Nizamuddin, New Delhi

Attendees:

1. Capt. Pawanexh Kohli (Chairman)
2. Mr. Atul Khanna (Co-Chairman)

Minutes of Meeting:

1. Meeting was convened at 1245 hours, minutes of previous meeting was reviewed.
2. Main action item from previous meetings was listed as follows-
 - a. List of committee members to be co-opted was reviewed.
 - b. Personal interactions were undertaken and invitations send in accordance.
 - c. Concept note of CSCL was shared and acceptances for good order received from prospective members.
3. List of members to extend quorum was tabled and seconded by co-chair. Following new members co-opted into committee:
 - a. Mr. Ramesh Kumar – Publisher & Editor at Large, trucking and highways evangelist and author of book “10000km on Indian highways”.
 - b. Mr. Ashok Mirchandani – Managing Director, Asia-Pacific Carrier Transicold.
 - c. Mr. Ravikiran Malik – Deputy General Manager, Department of Storage and Marketing (DSM), NABARD.
 - d. Mr. VK Gopalakrishnan – Vice President & Global Practice Leader, Genpact.
 - e. Mr. Amitabha Chaudhuri – Managing Director, APL Indialinx.
 - f. Mr. Anil Arora – Managing Director, MJ Logistics.
4. A communiqué confirming members of their official induction into committee would be sent and the next meeting coordinated with them in month of October.
5. Previous minutes of meetings would be shared with the new members and comments invited on way forward. Appropriate opinions would be tabled for discussion in next committee meeting.
6. Mr. Ramesh Kumar had suggested to the chair that his earlier planned study of highways in north-eastern states be suitably aligned with the committee objectives. The same was discussed and it was proposed that this be undertaken as a task force item under the committee.
7. Director NCCD was approached and approval for same was granted. An itinerary will be shared as available – as all travel undertaken would be on actual trucks plying the region. The agenda of this task would be to assess and take feedback of the impact of existing status of road infrastructure and grass root bottlenecks on agri-produce marketing in the NE states. Simultaneously, a basic review of post harvest infrastructure and available storage

infrastructure would be attempted, in that region. Mr. Kumar would submit a concise report in tandem with his earlier planned dissertation to other agencies.

8. It was recommended that with extended quorum, members be asked to form task forces to undertake fulfillment of specific objectives of the committee. The same would be discussed and acted upon in the next meeting.
9. The committee also recommends that it's activities be suitably listed on the NCCD website; this would be also discussed and refined upon in the next meeting with all members.
10. The committee recommends compiling a history of the cold supply chain in the country to form part of its public interface, aimed at highlighting the various stages and trends occurring in the cold chain sector. Support from committee members would be sought for this task.
11. Meeting was closed at 1530 hrs.



(Payanexh Kelli)
Committee Chairman

Attachments:

Nil

Committee for Supply Chain & Logistics for Post Harvest Marketing

National Centre for Cold-chain Development

[A Govt of India initiative]

Reference: M3-1012-SCLPHM

Subject: Meeting of Committee (SCLPHM)

Date of Meeting: 5-October-2012

Venue: Office of SFAC, NCUI Building, New Delhi

Member Attendees:

1. Pawanexh Kohli (Chairman)
2. Atul Khanna (Co-Chairman)
3. Ashok Mirchandani - Managing Director Asia-Pacific, Carrier Transicold.
4. V. K. Gopal Krishnan - Vice President & Global Practice Leader, Genpact.
5. Amitabh Chaudhari - Managing Director, APL Indialinx.
6. Ramesh Kumar - Publisher Editor, Supplychain India.

Members absent:

1. Ravi Kiran Malik – Deputy General Manager, NABARD
2. Anil Arora – Managing Director, MJ Logistics.

Guest (2nd half):

1. Charles-Antoine Gondrad – LoGon Investments and Gondrand Logistics, Switzerland.

Agenda:

- Introduction between committee members
- Develop a road map for the committee, basis earlier shared concept note.
- Invite a task force under each member so as to revert with a published report.
- Schedule future interface between members with at least one meeting every quarter.

Minutes of Meeting:

1. Meeting was convened at 1100 hours, with introductions between members.
2. The road map for NCCD (presentation) was shared with committee for review and understanding of NCCD agenda.
3. NCCD structure and organizational status was shared with members.
4. Basis roadmap understanding, members were requested to review and suggest possible definitive tasks to be undertaken under their leadership. Separate task forces could be initiated with targeted study reports to result.
5. Query was raised on resources availability for taking on tasks. Chair explained that basis the initial concept note on specific topics, the same would be evaluated and appropriate resources deployed through other apex departments, or directly by NCCD.
6. Status of earlier recommendations by the committee was shared; that these had been taken seriously and were under proposal formation - namely nationwide survey of cold chain assets and study of connectivity in NE states on PHM infrastructure.
7. Lack of business awareness and educating entrepreneurs on business aspect of a cold chain was raised. It was shared that special reach out programmes and other medium to raise awareness on financial schemes, operational matters and others were planned by NCCD.

Nonetheless, formal education on business curriculum was not being considered by NCCD as of now. All members unanimously concurred with NCCD agenda of promoting greater knowledge dissemination and greater need for training courses.

8. Guest member (Mr. Charles-Antoine Gondrand) joined the meeting and was introduced to committee members – foreign private equity investor seeking specifically opportunity to invest in India in the logistics (cold chain) sector. The antecedent of Gondrand Group dates back to 1866 and it remains one of the oldest privately held logistics companies of Europe. Members were invited to interact with guest to assess perception status of foreign investors in this sector.
9. During discussion, the following specific points were raised –
 - a. Lack of industry level key performance metrics for cold chain.
 - b. Lack of standardized processes and handoffs between stakeholders in cold chain.
 - c. Policies, which have a direct impact on performance of the industry as a whole vis individual businesses.
 - d. Lack of a vision structure towards which the industry as a whole should aim for.
10. The members agreed that a document be prepared for a target eco-system, looking ahead minimum 5 years from now. This would aid in giving direction and would be similar to an as-is/what-if study. Mr Gopalkrishnan who mooted this point, will revert to all members with his thoughts, which basis feedback, would be converted into a concept note for a recommended task.
11. It was noted that uptime of the cold chain is highly dependent on maintenance and upkeep of its equipment. It was not clear if a common maintenance framework existed for guidance.
12. The implication of bank loans on refrigerated vehicles was discussed. In current scenario, the vehicle is treated separately and hypothecated to the lending bank. The insulated body and refrigeration unit, which are core to cold chain utility, are treated separately for loans. For these two components that comprise 50% or more of the cost, hypothecation is not possible and 30% margin money is required from buyers. Mr Ashok Mirchandani is requested to share inputs on same matter, with possible policy recommendations.
13. Refrigerated cargoes are not assigned any special status at interstate borders and checkposts. The benefits gained from cold chain deployment are detracted by lack of urgency at highway bottlenecks. Mr. Chaudhari offered to circulate a note on how railways and private container train operators can contribute to multi-modal cold chain and green corridor concept. Post circulation, and inputs from other members this note could form as part of knowledge sharing on NCCD website.
14. Mr. Ramesh Kumar shared his plan for his en-truck tour to NE states whence he would evaluate impact of available infrastructure on Post Harvest Marketing. Said study would allow insight into an ignored region and should lead to raised interest on PHM in NE states. Concern was raised on special ‘Inner Line Permit’ required for road travel in that region. The same would be shared for appropriate support from Director NCCD.
15. Inputs and primary notes would be circulated by members as above and next meeting date would be finalized accordingly. The minutes and follow-up notes would be circulated to absent members for comments.
16. Mr. Gondrand explained his interest in India and that he was keen on partaking in the growth of the cold logistics sector through private investment in companies. He expressed his pleasant surprise to observe such senior industry representation in the committee to assist the government in its developmental agenda. He too articulated that appropriately experienced & trained personal were not common in his search for investments in India. He continues to visit India once a month to observe and study opportunities.

17. Members were advised that NCCD would be supporting ICE-GCCA conference on 4th and 5th December and their promulgation of the same would be appreciated.
18. Meeting was closed at 1310 hrs.

Conclusions

Next steps by Committee:

1. Following notes would be reverted by relevant committee members-
 - a. Future realistic expectation from Indian cold chain 5 years from now, aimed at development of possible catalytic support to achieve the same – Mr. Gopalkrishnan.
 - b. Note on railways and cold chain, aimed at supporting aim to achieve multi-modal fast track corridor for perishables – Mr. Chaudhari.
 - c. Note on current financing options for refrigerated transport and recommendations to promote ease of funding reefers – Mr. Mirchandani.
2. Notes would be circulated for comments and for targeted task force establishment.
3. Special 'Inner Line Permit' for travel in the NE states would be sought from Director NCCD for the study planned in that region.
4. Next meeting date will be decided with mutual consideration of entire quorum. In the interim, members are pleased to interact mutually towards coordinating towards formulating a list of guiding tasks.


(Pawanexa Kohli)
Committee Chairman

For Records:

1. Mr Anil Arora was detained due to last minute medical emergency in the family.
2. Mr. Ravi Kiran Malik did not receive final email confirming date of meeting.
3. Any notes or suggestions from members' reference meeting would be circulated on record to all members.

Committee for Supply Chain & Logistics for Post Harvest Marketing

National Centre for Cold-chain Development

[A Govt of India initiative]

Reference: M4-1112-SCLPHM

Subject: Meeting of Committee (SCLPHM)

Date of Meeting: 4-November-2012

Venue: Kalinga Room, Hotel Ashok

Member Attendees:

1. Pawanexh Kohli (Chairman)
2. Atul Khanna (Co-Chairman)
3. Ashok Mirchandani - Managing Director Asia-Pacific, Carrier Transicold.
4. V. K. Gopal Krishnan - Vice President & Global Practice Leader, Genpact.
5. Ramesh Kumar - Publisher Editor, Supply chain India.
6. Ravi Kiran Malik - Deputy General Manager, NABARD.

Absent Members:

1. Anil Arora - Managing Director, MJ Logistics.
2. Amitabh Chaudhari - Managing Director, APL Indialinx.
(prior intimation not received from absent members)

Guest Member:

1. Pankaj Mehta, Country Head. - Carrier Transicold

Agenda:

- Presentation or discussion from members who have concept notes from last meeting.
- Presentation from Mr. Ramesh Kumar reference NE study trip.
- Finalising a Road map and guidelines for this committee.

Minutes of Meeting:

1. Meeting was convened at 14:30 hours; Chairman welcomed the members and gave his opening remarks on the meeting. NCCD secretariat members were introduced.
2. Leave of absence was given to absent members.
3. The Minutes of previous meeting M3-1012-SCLPHM were confirmed.
4. Mr. Ashok Mirchandani shared his concept note; the common invoice system for reefer truck manufacture.
 - a. It was highlighted the current invoice system wherein the truck the chassis and the body of the truck are covered under different invoices and usually subsidy consideration is only provided against single invoice of the truck.
 - b. A single invoice system also guaranteed easy availability of finances since smaller operators can avail customized financing. Currently only larger companies can avail easy finance.
 - c. The chair mooted the idea of recommending for a common chassis number on all the components as a permanent fixture.

- d. The chair emphasized that currently the weakest segment in the country with respect to cold chain is the transport sector namely the reefer truck segment, hence this concept was essential and should be further developed threadbare before being tabled.
5. Lack of large truck manufacturers and their role in producing a composite reefer truck was discussed, Indian manufacturers like Mahindra and Tata have begun producing reefer trucks but and are still in nascent stage of market entry since there are locally fabricated and assembled trucks currently in use.
6. Mr Ramesh Kumar, shared the following specific points following his study tour to understand supply chain issues in Northeast. A detailed report would be mailed by him in three weeks.

Arunachal Pradesh

- a. Lack of road connectivity to Arunachal Pradesh.
- b. Lack of seriousness in farming sector due to lack of a profit motive.
- c. Farming is no longer the primary source of income as people have started to rely on Government backed project contracts as a primary source of revenue.
- d. Gave an example of the Tata's 'Indian Kiwi' venture, which had entered into contract with local kiwi farmers. The contract fell through due to reluctance of farmers to sell only a particular size of kiwi as opposed to buying the whole crop.

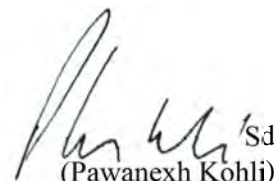
Assam

- a. Lots of crop based groups in fruits like oranges and bananas, which is a good encouragement as they share inputs and work collectively with state horticulture Directors.
- b. Karimganj in Assam, was identified as trading post for fruits and vegetables produced locally, and is dominated by middlemen who buy Indian kiwis produced using Indian farm subsidies, and export it through river into Bangladesh, where they are post processing are packaged and exported to Gulf countries, labeled as Bangladeshi kiwis and pineapples.
- c. Road infrastructures are currently under development for better linkages with mainland but are expected to complete only after 6-7 years. There is a possibility of using river linkages on the Brahmaputra River and the potential needs to be further explored. Similarly air connectivity is also good and can be relied on transport of air cargo in high value fruits and vegetables.
- d. The need for better information sharing of issues highlighted with the concerned authorities and linking the buyers and farmers through NCCD.
7. Mr. Ravi Kiran Malik informed the meeting of the role of Nabard in creation and development of farming & post harvest management in the country. It has an operational budget of 200 thousand crore rupees and employed 4500 people across India.
 - a. He informed that currently Nabard was not allowed to lend directly to farmers or private institutions due to a recent ruling from the Ministry of Finance, and is currently restricted to providing State Governments and Government bodies only.
 - b. Nabard's current top priority was providing financial incentives to Agri-marketing, and it is provided refinancing to everything from warehouses to cold chain infrastructure components.
8. Mr. V. K Gopal Krishnan gave a presentation on developing a framework for "Cold Chain Ecosystem" covering issues like 'key industry challenges' and 'outputs expected'.
 - a. The framework would require inputs from all committee members and could be used to develop a future vision document or roadmap setting reference.

- b. Mr. Gopal Krishnan would communicate with other committee members to further develop the framework document.
9. After the presentations the committee decided to interact further on the preliminary concept notes and prepare proposals as applicable to submit to the governing council at next opportune moment.
10. The need to reply to emails within a stipulated time was discussed by all committee members. Chair suggested that members take personal responsibility to respond within a 10 day time frame. Mr Ashok Mirchandani recommended a 3 day response to communications should be followed.
11. The chair recommended that committee members suggest operational guidelines for the meeting including email responses, sharing of concept notes prior to meetings, advisement on attendance of meeting and availability to interact on phone. Where commitment to the task as committee member was inclement to members' existing responsibilities, said members were free to suggest alternative option and could seek relief from this responsibility so as not to inconvenience other members.
12. Members were advised of positive follow up action undertaken by Ministry on the committee's recommendation to conduct base line study and nationwide mapping of cold chain infrastructure.
13. The next meeting schedule was not confirmed and details to be informed in January 2013.
14. Meeting was closed at 17:50 hrs.

Conclusions

1. Committee members to submit recommendations on operational guidelines for the committee.
2. All communication to be replied to by committee members within 7 days.
3. Any absence or inability to attend should be intimated prior to the meeting.
4. Existing concept notes to be finalized to present on file with recommendations.
5. Members are exhorted to communicate and share ideas as part of team development.
6. Project Reports for pilot activities and resource allocation can be tabled to committee.
7. Members who are not able to commit time to the committee responsibilities are requested to recommend other senior members from industry in extending the quorum.
8. Members are also free to request relief from committee participation.



(Pawanexh Kohli)
Committee Chairman

For Records:

1. The venue was provided by the organizer of ICE cold chain summit at the Ashok hotel.
2. Mr. Anil Arora and Mr. Amitabh Chaudhari remained absent during the meeting.
3. Any notes or suggestions from members' reference meeting would be circulated on record to all members.

National Centre for Cold-chain Development

North East Study Tour
Committee on Supply Chain and Logistics

Query Items and Record Format
used during visits to cold storage facilities

NE Post harvest Infrastructure Survey (CSCL - RK)

SAMPLE Query Form



Explanation: SAMPLE FORM (designed for use on computer)

Date of Visit:	5-Nov-12	Year Commissioned:	5-Nov-92
Facility Name:	Ace Services and cold store Solutions		
Address line1:	123, road XYZ, off NH 000		
Address line2:	NA - or Lat: 22, Long 81 - or Locally known as Oz Theatre		
Contact person:	Subrata Ghosh	s.ghosh21@no-one.com, 981234567	

	Distance - Name	Remarks if any
Nearest Highway:	5 km xyz	Multi Storey 2 level facility, only office on top
Nearest Rail/Air:	27 km pqr	
Nearest Market:	4 km abc	

Type of Infrastructure:	Number	Temp °C	Remarks (Age, Operational, Seasonal, Not in Use)	
Pre-Cooler	Y	2	>10°C	5 yrs, not used for 1 year, unoperational
Cold Store	Y	1	>0°C	11 yrs, seasonal use, operational.
Pack House	N			
Others (Ripen, etc)				
Reefer Trucks	Y	1		Rarely used, under lease to another company

Type of Produce Handled:	Name Product types	Temps °C
Single	N	
Multi	Y	
Horticulture	Flowers in season	>0°C
Meats	Pork	<-18°C
Fish	Fresh fish only, no frozen fish here	0°C
Other	Sometimes stores medicines in off season from Jul-Sep	>0°C
Other		

Type of refrigeration	Manufacturer Name/Model	Refrigeration Capacity in KW or BTU, etc	
DX Freon System	Y	ODU Bitzer or Copeland, model unknown	80KW, semi-hermetic
Ammonia		ODU	
Other (explain)		ODU	
Evaporators	IDU	Roller make, model KW5	2 Nos per chamber

Remarks if Any

(visual status of equipment, spares available, maintenance concerns, age of machinery)

- Visit Date & Date / Year facility first brought into operation
- Name of establishment
- Address with local landmark
- Or Geographic coordinates (Lat/Long) or geotagged picture
- Contact person and contact details
- Kms off and name of highway (indicating road size).
- Railhead or Airport
- Nearest wholesale market or their captive market

- Type of infrastructure available inhouse
- Could be more than one pre-cooler to each cold store
- Packhouse maybe appended to infrastructure
- Ripening rooms, Processing plant, Auction House
- If any owned reefer trucks
- If designed for single commodity then name of product
- If multiple storage, then:
 - Names of horti cargo stored
 - Typically Mutton Beef Pork in NE
 - Names not necessary for fish (fresh or frozen)
 - Flowers, Butter, Cheese, Pharmaceutical, etc

- Type of refrigeration system used (ODU is Out door unit)
- A facility may have more than one type (rare in NE)
- Could be Hybrid, solar powered, water driven, etc
- Evaporator Model (In Door Unit - cooling blower)
- Usually names like Emerson, Kirloskar, Frick, Bitzer, Patton, Roller, Local, etc
- Your subjective view

Refrigerated Chambers

Number of chambers -	3	Vol	Floor	Size (LxBxH)	ft/Mtr	Temp °C	In use?
Storage Capacity 1	280	M³	0	10 x 7 x 4	Mtr	0	Y
2	400		0	10 x 10 x 4	Mtr	10	Y
3	192		-1	6 x 8 x 4	Mtr	-18	N
4							
5							
6							
7							
8							

- Please enter volumetric capacity
- in Cubic metres, Cubic Feet preferably, else Metric Tons
- Alternately, enter size of each room (L x W x H)
- Enter which floor level - basement, ground, first, multi, etc
- Enter Temp maintained in each chamber
- Y or N if sighted in use - occupied

Remarks if Any

(If facility in operation, capacity constraints or shortfall, remarks on capacity from owner, age of infrastructure)

- General Remarks/Opinion on cold store
- Whether in use currently
- Chambers clean or unhygienic

Insulation Type in Use

PUF, thermocol slab (type of insulation used, age of insulation)
Rockwool, etc.

- Ask facility manager whether-
- PUF, thermocol slab (EPS (expanded polystyrene), XPS), Fillers (Rockwool, husk) or adobe and/or brick/mortar

Manpower Deployed

	Number	Training or Certification	Permanent?
Warehouse Manager	1	School 10+2	Y
Reefer Technicians	1	Vocational	Y
Tally clerks	1	NA, hired on demand	N
Accountant	1	Owners Son	N
Shift workers			
Others			

Attends in season

- Usually will have at least one onsite incharge and contracted employees

Power Backup and availability

	Capacity	Fuel or Consumption
Back up generators Y	55 KVA	250 monthly (ltrs per month, annum, day)
Grid Transformer size	105 KVA	6 hrs/day (Grid hrs per day, etc)
Power Monitoring capability N	Manual control of Consumption	

- Capacity of DG sets
- Transformer capacity for Grid Power
- (Besides power meters, any remote monitoring, automation)

Ancillary Equipment / Info

Humidifier used: N	Air Ventilation: N	Firefighting: N	Air curtain on Doors: N
Fork Lifts used: N	Conveyor Belt: N	Shaded Truck Parking: Y	Strip Curtain on Doors: Y
Racking system: N	Cargo Lift: NA	Unloading Ramp: N	Maintenance Contract: N

- If cargo lift (in multistory facility), conveyor, forklifts used
- If air curtains, strip curtains, firefighting equipment, etc
- Shaded parking for trucks, Dock Levellers
- Annual Maintenance Contract for machinery

Capacity Utilisation	(in approx %)		approx KWH or ₹
This Year	<input type="text"/>	Energy Bill	<input type="text"/> Rs
Previous Year	<input type="text"/>	Energy Bill	<input type="text"/>

--- Stated overall Capacity that was used to date this year and in previous year, with associated energy cost.

Interview (with owner or manager)

--- Stroke out to indicate owner or manager

- What is business prospect, or need for cold storage infrastructure in the area?

- What is business constraint or need for cold storage infrastructure in the area?

- What business model is used (rental, captive, part of suply chain service, mixed)?

- What is assistance if any is sought from Govt of India?

- Have they heard of NCCD, would they become members?

- Is there need for any cargo handling training programs?

- Is any machine operating or maintenace training needed?

- What kind of infrastructure improvement needed for their business? (roads, trucks, storage, etc)

- Have they heard of Negotiable Warehouse reciepts by WDRA?

General Remarks

Upkeep of Facility: _____
 Hygiene Surrounding: _____
 Others: _____

--- Your subjective impartial opinion in this section please! Focus on human capacity, understanding, mood, attitude.

Note: This Form is a tool and has drop down boxes, these sample sheets have indicators of the drop down options (units, temperatures, Yes/No, time periods, etc.). During pre-trip briefing, will explain details for using the format. Feel free to add more details where required.



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>
3. Marketing Infrastructure	<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>
4. Processing Units	<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>
5. Institutional Support	<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>
6. Business practices	<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>
7. Neighbourhood Issues	<p>Arunachali produce cannot exit out of its boundaries into mainland or wherever without crossing Assam, its southern neighbour.</p> <p>Frequent bandhs, extortion/RTD 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>

Challenges	Solutions
	<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>
8. Growers' Mindset	<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>
9. Export opportunity	<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 Bangaladesh 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>
10. Cooperative grouping	<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>
11. Brand Promotion	<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>

Challenges	Solutions
	<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:

#	Location	Name	Status & contact details
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 Tezu. Lot of local insight)	Driver, HDO, Tezu Mobile: +9198630 34348
7	Tezu, Arunachal	Ramanand Sarma	LIC Agent & Farmers Connect Mobile: +9194360 49096
8	Tezu, Arunachal	Bacham So Tayang	Farmer, Orange, Black Pepper, Ginger, Passion

#	Location	Name	Status & contact details
		Tezogam Village	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, Hawaii, 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
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

#	Location	Name	Status & contact details
			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 Son of Jommy Mele MBA from Symbiosys, Pune Bosch cutting tool dealer in Itanagar	Mobile: +98560 32125 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.meto-chiliko.com metodebang@ymail.com
56	Roing, Arunachal	Gowri Shankar Representing Karimganj exporter	Buyer – Orange, pineapple Mobile: +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

#	Location	Name	Status & contact details
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 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 Tasung 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 – Anthurium flowers Mobile: +9194360 53020
77	Pasighat, Arunachal	Ms Oti Sitang Eko	Farmer – Anthurium 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 Ex-serviceman 1962 China war	Farmer - Orange
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

#	Location	Name	Status & contact details
			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 Renging 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 Renging 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 Yagrun Village	Farmer – Orange, pineapple
98	Sissen, Arunachal	Tajir Siram Sissen basti	Farmer – Orange, Balancia/mosambi, ginger, pineapple, jatropa, 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 group	Farmer – Orange etc.
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

#	Location	Name	Status & contact details
		Transporter/ Works with Tarang Taga	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 Divisional 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 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

#	Location	Name	Status & contact details
134	Ziro, Arunachal	Kalung Bida Secy, Kiwi Growers Club, Lower Subasiri District	Farmer-Kiwi, Large cardamom47902 Mobile: +9194360 afs.ziro@gmail.com
135	Ziro, Arunachal	Lika Saya MLA	Parliamentary Secy-Agri/Horti Govt of Arunachal Mobile: +9198101 17159
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 Apex bank	Farmer – Kiwi 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

#	Location	Name	Status & contact details
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
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

#	Location	Name	Status & contact details
			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
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 Mobile: +9194350 87204 Shahbuddinahmed46@yahoo.in
198	Guwahati, Assam	Hemanta Kalita	Horti Department Govt of Assam Mobile: +9198540 51055
199	Tinsukia, Assam	Turakanta Hati Barooah Habadagaon	Farmer- vegetables Mobile: +919613984338

#	Location	Name	Status & contact details
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 Tamuli bongaon village	Farmer-orange & vegetables 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

Communications record from the Tour

Date: 29-10-2012

Dear Capt. Pawanexh Kohli,

Met Dr Hanse, Dir (Horticulture), Govt of Assam today.

He introduced me to his team of officials:

- Mr M M Ray, Joint Director (Horticulture)
- Mr N K Sharma, Deputy Director (Horticulture)
- Mr M D Bharali, Agriculture Development Officer

I briefed him about the study underway. Mr N K Sharma has been nominated as the Protocol Officer for this purpose. Dr Hanse suggested that a meeting with Assam State Agricultural Marketing Board will be of use in this regard.

Hence, Mr N K Sharma took me for a meeting with Mr Dhiren Sharma, Deputy CEO of this Board. He and his Executive Engineer Mr Bul Bul Hussein heard me about.

And in consultation with Mr N K Sharma, they have chalked a visit plan to some cold storages and wholesale auction yards in and around Guwahati tomorrow (30 Oct 2012)

Spoken to Mr B R Baruah, General Manager (Finance & Administration), NERMAC. It is closed today on account of some festival. Will be meeting him soon.

It is felt that a detailed study of each state would be of more value than a whirlwind trip. Mr Dhiren Shama of Marketing Board maintained that a full-fledged study of agri-marketing will be of greater utility.

Post visit to cold storages/auction yards will fill in with more inputs. See photos:



Horticulture Team (Right to left: Dr Hanse, Mr Ray, Mr Sharma and Mr Bharali)



Marketing Board CEO Mr Dhiren Sharma and Marketing Board Executive Engineer Mr Bul Bul Hussein & Horticulture Team Mr N K Sharma

Travelled 180 km whole day, covering two cold storage facilities and visiting a farmer-duo who aided by Assam Horticulture department is growing tissue cultured – flowers and thereby improved his cashflow.

To cap it, visited a wholesale marketing facility (large one), but farmers visit only Sundays. Other days prefer roadside mandis.

Can you imagine a 5000 MT capacity cold storage @ Changsari aided by government (state and centre) sharing the same compound with a cement plant and open cement stock yard ... (owner of both is same!)

You waded through dusty and cement filled environment to the cold storage!

Can you imagine flowers, potato, cheese, butter and kishmish sharing the same temperature (7-10 degrees F) cold room? It is a reality.

Of the two cold storages, 1500 MT capacity one was on the desired format becoz good input was forthcoming.

Second one (5000 MT capacity), had the cement plant manager managing it since the cold storage manager has gone on leave! He has no background, no inputs to share...

Shocking, but significant findings.

Money poured/pouring into cold storage establishments. But no monitoring on a regular basis, I feel.

Date: 31-Oct-2012

Attn: Mr S K Singh, Assistant Director, National Horticultural Board, Guwahati

Dear Mr Singh,

Nice meeting you this evening on the above subject.

Earlier in the day, I visited Reliable Cold Storage in Paltaon, Azara, Kamrup district in the company of Mr K N Sharma, Deputy Director (Horticulture), Govt of Assam for a spot check and found the facility is closed down.

Enquiries in the neighbourhood revealed that the cold storage facility was never 'functional'.

Since Mr Sharma's list denoted that the project is funded by Nabard, we visited Nabard regional office for a meeting with Mr R K Behra, Deputy General Manager and that is we learnt that the Assam list has erroneously mentioned Nabard whereas it is funded and overseen by NHB, under your jurisdiction.

As suggested by you, I will call on you tomorrow to collect details of all NHB-subsidised cold storage facilities, owner/entrepreneur details (to check on why projects like Reliable mentioned above have not taken off) etc.

This will give an opportunity to interact with your Horticultural Officer, who was on leave today.

Look forward to meeting you,

Date: 30-Oct-2012

Dear Capt. Pawanexh Kohli,

Dear Mr Baruah,

Thanks for the time you could spare today to discuss the role of NERAMAC in the region and my travel/accommodation plans at all states over the next 30 days as I traverse through.

While Mr Angadi gave a brief history of NERAMAC, Assistant Marketing Manager Pradeep Bhuyan provided dope on his field experience since he handles all logistics (procurement, consolidation and transportation from production centres from all 7 states) and the final transportation outside Northeast.

It is a wonderful suggestion to visit Assam-Meghalaya border town from where NERAMAC procures hilly grass for broom and other items tomorrow and also understand the dynamics of NGOs interaction with NERAMAC in managing at the production centre.

Also the visit to the model processing plant NERAMAC had put it up in Assam is doable.

Since you have offices in all states, I request you to make my staying arrangement in each of these states. (overnight shelter and bathing facility).

I will be moving to each of these destinations on my own.

I propose to be spending at least 4 days in each state.

However logistics of visits to showcase pieces and NGO or farmer interaction will be handled by NERAMAC.

Look forward to the finalization of Assam-Meghalaya border trip and model processing plant visit over the next two days.

Attn: Mr Manabjyoti Das, SFAC Regional Centre, Guwahati

Dear Mr Das,

This has reference to our conversation over phone today on the above issue.

During the course of my interaction with Chief Scientist Dr Sarat Saikia at Horticultural Research Station of Assam Agricultural University, Kahihuchi today, he mentioned that you had done a research paper on the above subject and suggested that we meet.

Thanks for agreeing to meet me tomorrow around 9.30 in your office.

Look forward to meeting you,

Date: 01-11-2012

Dear Capt. Pawanexh Kohli,

A few thoughts to mull over from the Assam beat...

* Cold Storages funded/subsidized by NHB via Nabard earlier and directly now NEEDS regular monitoring by visits to sites. This becomes of paramount importance because it is a given that every single entrepreneur avails of the best brain in the arena to get the Detailed Project Report/Blueprint done.

Everything looks hunky dory on paper and perhaps even initial/preliminary visits to sites give a semblance of all-is-well signal. But entrepreneurs begin to cut corners for a variety of reasons. DPR may talk about multi-user – meaning different climate zones within Cold Storage facility for different products, but quietly settle down for one climate-for-all commodities for two reasons viz.,

- to keep costs as low as possible and improve his bottomline;
- disinterest or lack of trained/educated pool of talent.

It is learnt that potato is the darling of all cold storage owners. It hogs the limelight. When non-potato traders – farmers are still reluctant to go to cold storage (will explain reasons soon) – approach with consignments of cheese, butter, kishmish, turmeric, mirchi, etc., cold storage owners tell them bluntly that the climate control inside CS is set for potato and will not be tinkered to suit non-potato items.

Many traders quietly acquiesce with the idea of evacuating his non-potato items as early as possible so that he does not suffer losses due to non-potato item turning bad.

Now to the farmer's reluctance to go to CS. It is learnt that one, the small and marginal farmers want instant cash when they part with their produce whatever it is. Keeping in cold storage (fresh items, we are talking about) costs money from the word 'go'.

To lead a daily existence, they need cash and dalals (middle men/traders) dish out instant cash with no paperwork.

The talk of negotiable warehouse receipt, they say sounds interesting. But they know little about it. Maybe awareness programme need to be beefed up.

However, even NWR route involves paper work and it is feared that CSs that may offer NWR services need 'oiling of their palms' to get and speed up x% of their produce value. The modus operandi of paperless NWR and no-hassle route may need to be relooked.

Even NERMAC does not engage in actual procurement of ginger (almost round the year), turmeric, hilly grass (for brooms), pineapple. Local NGOs handle this area and NERMAC takes care of logistics – packing, transporting to Guwahati, consolidation at Guwahati and pushing it into mainland.

NERMAC sells and THEN compensates farmers/local agents after realization. Maybe to make it attractive, two-level compensation can be tried out. One payment instantly on procurement and second post-realisation by NERMAC.

- Pineapple processing in Tripura by NERMAC has been shut down due to poor performance. Meaning less business, but higher overheads. Heard companies like Dabur places order for pineapple jam and it is executed.

What is needed is a core Business Development Team in NERMAC in mainland with main processed food mfrs to procure orders and get it executed. Whole hearted marketing support, perhaps, can help better cashflow and possibly upgradation of its processing facility.

- Similarly, ginger items (ginger power, oil, paste) can also be mass marketed through metro super bazaars. There is a greater health consciousness and ginger is seen has a big plus factor. Plus, healthcare institutions (both private and public) can be approached to source ginger, turmeric for their captive use.
- Greater involvement of NGOs (who are more active) in many betterment of livelihood in hilly region should be tapped because there is a lot of ground engagement and higher trust factor than dealing with government departments.

Dear Capt. Pawanexh Kohli,

Visited National Horticultural Board for a discussion with Mr S K Singh, Assistant Director and his second in command Mrs Nabneeta.

Since the practice of routing of NHB funding of cold storage facilities in NE region through NABARD has been suspended, NHB hq has begun doing it directly.

Singh, who has taken charge of North Eastern Regional office of NHB, claims that nothing is happening since he came in.

So all is quiet on this front.

Asked to explain what ails horticulture/cold chain development in the region, he listed three issues:

Bankers' reluctance to lend money to potential cold chain infra entrepreneurs.

Land ownership (only locals can own. Outsiders can't). However, some entrepreneurs are trying to overcome by roping in sleeping partners from the local community so this challenge is overcome

HR shortage. "Just two of us expected to manage 7 states. Simply impossible."

Though both have technical background, they handle admin, accounts etc. Underutilisation of their caliber...

Met Mr Das and Dutt of SFAC Regional Office. They have done a "Value Chain study in NER" with specific reference agri/horticulture arena. Shown hard copy and promised a soft copy. Will share it once I get it.

Both had travelled extensively in the region interacting with farmers and aggregators at the ground level. Praised NGOs for their role. They again said, NGOs enjoy more trust than govt officials.

"Kiwis from Australia reach Delhi/Mumbai markets faster than kiwi from Arunachal" is how they put it.

Poor connectivity and exorbitant transportation cost are issues to be dealt with.

Interacted with North Eastern Development Finance Institution or NEDFI chairman and managing director Paul Muktieh.

NEDFI is a consortium set up by IDBI as lead and others include SBI, LIC etc. Been in existence for 18 years plus.

NEDFI is skeptical of funding cold storage facilities. It had done in the past, but those projects bombed. Why?

Says he: people in the region are rigid on pricing (no negotiations at all) and grow only what they need. No dreams to make it big. They believe in self sufficiency. They sell in local markets whatever little they can which they feel is excess. He says that food processing (mass level) will not work in this region because of regular supply constraint. So businessmen are wary of doing anything in this region.

The mindset is low volume and high margins, not high volume-low margins.

They are definitely 30-40 years backward still compared to rest of India, it is said.

Talking about NERAMAC, he says it could not manage the pineapple processing unit in Tripura due to raw material supply constraint.

Plus lack of demand.

Interestingly, NHB Nabneeta said there is absolutely no realization of kiwi fruit's health benefits and taste issues in the region. Beyond bananas and pineapple, they invariably don't pick up kiwi at markets. So, there is no domestic/local consumption.

Build connectivity – road. Automatically things will improve, says Paul.

However, cement plants, steel rolling mills do well.

What about the security issue in the region which perhaps might be putting off potential investors.

He pooh-poohs the idea. He says every state in India has safety/security issues.

All biz men know how to tackle this issue. In fact, this management fee is far lower than what is obtaining in rest of India. So, security is not a serious issue in the region at all for promoting development.

Met Hyundai Motors India Regional Head Bedabrata Bordoloi. Development is definitely taking place in the region. How does know. He says: go near the Brahmaputra crossing and watch the passage of trucks and ODC moving Guwahati as a gateway to other north eastern states. Plus the traffic on Brahmaputra old bridge is so heavy (I did experience) that a new four lane bridge is under construction.

Another pointer is the increased sale of compact passenger cars for all auto OEMs: Maruti, Hyundai, General Motors etc are selling more, despite a slump in rest of India.

Date: 02-11-2012

Attn: Mr Hanse

Greetings.

Wish to thank you for the excellent hospitality extended to me over the past few days as guest of yours in Guwahati.

Special thanks to Mr N K Sharma for showing around the cold storages (functional and non-functional) in Guwahati.

Sir, **am leaving for Tinsukia, Upper Assam tomorrow by truck** – as part of the cold storage study under the NCCD directive of Ministry of Agriculture, Govt of India.

Therefore, I request you to assist me with accommodation (govt guest house facility) in Tinsukia for 3 days from Monday, 5th November.

Also kindly link me with your departmental horticultural officer or anyone who will show me around cold storage facilities situated in Tinsukia and nearby.

In fact, the list of cold storages given by you, lists out three initiatives in this regard at Tinsukia, Chepakhowa, Bordumsa as item No. 13.

Again, nearby Dibrugarh displays Lahowal and Barbourah actions in this connection. I wish to visit them also.

And Sivasagar has one at Sapekhati.

Sir, Kindly link me with the official in Tinsukia to take it forward.

Look forward to hearing from you at the earliest.

2) One more request.

After Tinsukia/Dibrugarh/Sibsagar cold storage visit, I will be returning to Guwahati again to hop onto my truck trip to Tripura/Meghalaya

Again, I may need 1-2 day accommodation facility in Guwahati 10th and 11th November (Sat & Sunday).

Attn: Mr Haj Kojeen, Govt of Arunachal (Mobile: 09436898989)

Dear Mr Kojeen,

Greetings.

This has reference to our telephonic conversation with you on the above subject on the advice of Mr Shailendra Kumar IAS.

As Member of the recently constituted National Committee on Supply Chain & Logistics, I am on a study trip to north eastern states to understand and assess the cold supply chain infrastructure as part of the post-harvest marketing initiative in each state.

Over the past six days, I was in Guwahati and leaving for Tinsukia for the same purpose in the same state this evening.

After Tinsukia visit which will be over by 8-9th November, I will be heading for Arunachal.

I need a INNER LINE PERMIT to visit across the state of Arunachal wherever ginger, kiwi and other fruits are grown, procured and sent to Guwahati for marketing purposes.

However, my first halt in Arunachal will be at ITA NAGAR where I will reach and meet you 9-10th November in your D Sector, Nahavlagun office on the same day.

After initial discussion with Horticultural department officials in Krishi Bhavan on the status of existing cold storage facilities and a meeting with state agri-marketing board if there is one, then I want to taken to some cold storage locations in and around Itanagar.

Then I will travel to the ginger- and kiwi-growing areas with your state govt official assistance (conveyance) for meeting producers of these items.

At this moment, I am yet to get complete details of these growers in Arunachal.

But SFAC has local office and they will provide NGOs who work alongside these growers.

So, I need permission to travel every district of Arunachal within a period of 15 days.

Possibly I may not visit all. Yet need clearance for 15-days access to all districts of Arunachal.

From Arunachal I may go to Nagaland/Manipur from whichever district I will be after completion of my visit in Arunachal.

For the entire stretch inside Arunachal, I seek government guest house accommodation and possible local transport.

To process this request of Inner Line Permit let me know what you need my side.

I carry my Driving Licence (photo ID). And a letter from Mr Shailendra Kumar IAS requesting all facilities be extended to me.

I am reachable on the mobile number: 09711544181.

Look forward to your indulgence.

Date: 4-11-2012

Dear Capt. Pawanexh Kohli,

Reached Tinsukia 0200 hours this morning after traveling 580 km from Guwahati in a Hyundai Car Carrier (9 cars) for delivery to a dealer here.

Yesterday, we halted at Rangagora village, Naogaon district, Assam en route and had spent a lot of time with farmers there who were bundling fresh vegetables to carry to the nearest market.

It is a village of 100 homes and almost 90% till land to grow vegetables, flowers etc and cold storage is something they are not aware of.

Daily they cart small batches of their produce to Guwahati and Naogaon market (130 km and 40 km respectively).

Throughout the day, they consolidate their produce on the NH37 roadside and around 3 p.m. it is moved in small trucks (not refrigerated) to the markets.

One of the young wannabe ITI-trained electrician and waiting for a state govt loan to set up his electrician biz said his father is a peon in Horticultural office locally. "Not much happens," says he, quoting his father.

My interaction with Assam horticulture team led by Mr Timuti Dass Hanse gives an impression that they are not aware of the Ministry of Agriculture setting up the

NCCD-NCSL at all. “No official intimation has reached us. Now you are coming and telling that you a committee member,” tell Mr Hanse’s members. Forget about me. They never heard about you nor about your appointment as Chief Advisor to the NCCD wi.e.f. 1 Oct 2012.

Maybe it is advisable a directive goes from the Ministry of Agriculture mentioning about the setting up of NCCD-NSCL and about its members, including your induction. A PIB release would also help across India.

I believe that the awareness about NCCD-NCSL is negligible or non-existent in other states as well.

Dear Capt. Pawanexh Kohli,

Reached Tinsukia early this morning.

As is the practice/convention among transporters, they have arranged for the next 24 hour stay since I travelled in their truck for 580 km over two days.

As part of the my highways study, thus rested for 24 hours at transporter’s benevolence, I invariably move out to another destination by another truck.

But now as part of NCCD-NCSL initiative, I need to spend at least 2-3 days more in each location.

This is where I need state government patronage in terms of guest house and local conveyance to visit auction platforms, cold storage and farmers interaction.

Plus the presence of the district/state horticultural official. Otherwise, entry into cold storages, auction platforms may be impossible for if I am on my own.

Coming back to Tinsukhia/Assam, I have been trying to touch base with Mr Hanse seeking his assistance for accommodation in Tinsukhia and enable visit to auction platforms which the state govt is supposedly building. He gave me a list of all actions in the state last week when I met (see below-A). But the phone remains unanswered. His deputies, whom I reach out, express helplessness unless directive comes from Mr Hanse.

Besides Tinsukhia, nearby Dibsagar, Dibrugarh (in 100 km radius) there are some cold storage/horticultural related work is believed to be happening.

If my stay at Tinsukhia for Monday and Tuesday can be arranged at govt guest house and a state horticultural official can drive me down to these places, then a report on these facilities will be possible.

During my meeting with NHB Assistant Director Mr S K Singh, he also gave a list (see below-B) wherein cold storages funded by NHB via Nabard in Tinsukia, believed to be there for almost 22000 MT capacity!

List A (Mr Hanse/Assam Govt)

Tinsukia – Chepakhowa – auction platform, boundary wall

Tinsukia-Bordumsa – auction platform, boundary wall

Sibsagar-Sapekhati-auction platform, boundary wall, drying yard

Dibrugarh-Lahowal- auction platform, boundary wall, drying yard

Dibrugarh-Barboruah-auction platform, boundary wall, drying yard

List B (Mr S K Singh/NHB)

Tinsukia-Mahibir Cold Storage-Unit 2 – 5000 MT (funded 2005-6)

Tinsukia-Mahbir Cold Stroage-Unit 1 – 7000 MT (2001-2)

Tinsukia-Karnitara Cold Storage-5006 MT (funded 2006-7)

Tinsukia-Green Field Cold Storage-5285 MT (funded 2006-7)

As far as List B is concerned, Mr Singh in Guwahati has to speak to relevant people in Tinsukia and arrange visit. I will hire a taxi and visit them. If NHB cannot arrange guest house, I will examine the possibility of permitting me stay at private guest houses. I will complete the List B visit in one day.

Kindly advise before Monday 4 p.m. to enable me plan my next move.

To: Capt. Pawanexh Kohli

Here’s an alternate plan to overcome the Assam hassles.

- Let me move to Shillong/Meghalaya from Tinsukia/Assam tomorrow. Can reach Tuesday where I don’t need a Internal Line Permit. Can spend 3 days (Tues-Wed-Thu 6-8 Nov), talking to horticultural officials in Meghalaya govt, interacting with farmers and visiting any cold storage facility. Need guest house accommodation and local conveyance for Tuesday to Thursday.
- Then Thursday evening will return to Guwahati and wait for transportation to Agartala/Tripura. (will take care of my accommodation in Guwahati on my own).
- Once I reach Agartala, post Diwali (15th Nov-Thu), 16, 17th Nov (Fri-Sat) will meet horti officials, interact with farmers.
- By then, if Arunachal permit requirement is through, I will go to Arunachal from Sunday 18th and spend the entire week because growers of ginger, citrus, flowers live at far flung districts.
- Or if Mizoram ILP can be arranged from Agartala, then I can move from Agartala to Aizwala/Mizoram.
- And hop to Imphal/Manipur – near to Aizwal – and Kohima/Nagaland whereagain ILP is required.

If arranging for ILP to Arunachal, Mizoram, Manipal, Nagaland gets dicey, I will pack up from Agartala and return to Delhi.

And plan next trip to these missed out 4 states in Feb/March with every single paper required to move in freely arranged in Delhi well in advance.

Plus by then, even those areas missed out in Assam due to ‘cold reception’ at present can be covered.

There are three cold storages in Tinsukia funded by NHB via Nabard over the past several years. They are:

Mahibir Cold Storage-Unit 1 – 7,000 MT

Mahibir Cold Storage-Unit2 – 5,000 MT
Karnitata Cold Storage – 5006 MT

To: Capt. Pawanexh Kohli

Imagine a second class non-ac sleeper in Indian Railways.

Well that sums up my sleeping mode in trucks when am on the national highways jaunt.

Just me, driver and conductor for company on a truck that moved on NH37 linking Guwahati with Tinsukia over two nights, covering 580 km.

Luckily the weather was pleasant – cool indeed forcing me to wear sweater and stick to jeans pant.

Usually am in my trademark red T-shirt and shorts! Not this time at least during nights.

Actually you cannot sleep because the ride is not smooth thanks to bad roads.

You really sleep for a 4 hour deep slumber when the truck halts past midnight and driver is tired to steer anymore....

Now I mastered the art of sleeping even such conditions!



But when you complete the journey, bones are rattled and demand for a full-fledged bed rest.

Luckily, transporters whom take me on as a co-passenger arrange for 24-hour stay in a 3-star hotel for a good day/night sleep before I pack up and move on to another journey... another half-sleep journey.

Interesting part is I am wide awake the movement truck comes to a sudden halt at anytime... my sixth sense tells that there is something wrong. Either a RTO or policemen obstructing the smooth passage.

Like it happened on NH37 two nights ago.

Around 1.30 p.m. our truck was stopped by half a dozen Assam policemen hardly a few kilometers before the Naogaon Paper Mills on NH 37.

We were waved down.

Paper demanded. Checked.

Demand for Rs.2000 'entry' fee cropped up. (Entry is nothing but a bribe!)

My driver Bharat Yadav refused to budge.

His driving license was asked for.

He valiantly handed over and began arguing with them.

"Rs.2,000 for what?"

One of the six policemen who plucked the license, walked away, leaving the rest of police team to haggle with driver.

I sat up and noticed the unfolding drama.

Then peace prevailed for a few minutes.

Traffic was building up behind us.

Policemen settled for Rs.20 for 'chai paani'! (Haha!)

License was returned to Bharat and we moved on.

Now I have become immune to this kind of dramas.

This does not excite me except...

I make note of such happenings and write to the state government Minister of transport, principal secy (transport) and a copy to NHAI through which am passing through. Of course, a copy goes to cabinet secretariat and to the Ministry of Transport in Delhi.

You must see the 'glee' in the faces of drivers when drivers in opposing direction signal with waving hands that there are RTOs or Traffic Inspectors (whom I referred to as highway vultures in my book).

Every single pie saved from donating to RTOs & TIs is a big bonus for drivers. They pocket it and write/tell their motor maliks that they indeed 'paid' RTOs.

Swindling is definitely on...

Since drivers know that I know their maliks well, they request not to share this info with their bosses.

But maliks know all these games. That is drivers are paid peanuts as salary!

Date: 5-Nov-2012

Attn: Capt. Pawanexh Kohli, Chief Advisor, NCCD & Chairman, National Committee on Supply Chain & Logistics, Ministry of Agriculture, New Delhi

Greetings from Tinsukia.

This morning edition of THE SEVEN SISTERS POST, an English daily in the Northeast region, has this story.

Maybe of interest to all of us.

Copy marked to Mr Timuti Dass Hanse, Director (Horticulture), Govt of Assam & Mr Dhiren Sharma, Deputy CEO, Assam State Marketing Board, whom I had met in Guwahati last week.

Trying to get in touch with Assam Chamber of Commerce Chairman Rupam Goswami, quoted in this news dispatch also.

Mr Hanse has spoken to me this morning and linking me with District Agriculture Officer Ms Rohini Gogoi (94353 91155) for visits in Tinsukia of auction yards and in neighbouring Dibrugarh and Sibsagar.

Mr S K Singh, Assistant Director, NHB, whom I had met in Guwahati, promised to link me with 3 cold storages funded by NHB for an aggregate capacity of 22000 MT in Tinsukia alone during the day.

Hope to visit over the next two days.

On the advice of Mr Timuti Dass Hanse, linked up with Mr Rohini Gogoi, District Agriculture Office, Govt of Assam in Tinsukia.

He has put Mr S S Rahman, District Agri Information Officer, to be the nodal officer to handle our requirement of meeting cold storage units (22000 MT) in Tinsukia.

Meanwhile, Mr S K Singh, Asst Director, NHB from Guwahati sent contact details of two cold storage owners (Mahabir & Karnitara).

Mr Rahman got in touch with them and alerted them about my visit to their facilities over the next two days.

Mr Singh: waiting for Green Field Cold storage contact coordinates. Kindly rush

Mr Gogoi and Mr Rahman attended a meeting with Deputy Commissioner of cold chain in Tinsukia later in the day and even he is aware of our visit to Tinsukia.

Mr Gogoi indicated that we may have to meet him also.

He also has taken the initiative of trying to figure out the auction platform/drying yard (3 such locations in Tinsukia) in the list given by Mr Hanse and working on the possibility of site visit to them also.

Meanwhile, I have moved in to the Circuit House till Friday to complete the survey.

2) Got in touch with Mr Hage Kojeen and at his request, written to Mr Narang Tani, District Agri Information Officer, Govt of Arunachal, in Ita Nagar. I indicated that I plan to visit Tezu in Lohit district and Roing in Lower Abong Valley where oranges and ginger growers are located. This is closer to Tinsukia. More locations are being added with help from SFAC as well. From there I will proceed to Ita Nagar for a face to face interaction with Mr Kojeen and others.

The Arunachal visit will begin from Sunday and last for the week (with diwali holiday/s in between) – 11-16 Nov. Request for govt guest house accommodation at all these centres also mentioned in the mail to Mr Tani. He promised to get back a.s.a.p.

Tinsukia has made arrangement for a vehicle to help my tour of cold storage etc in Tinsukia.

3) A request is being sent to Mr S.K. Singh (NHB) to list out contact details of any NHB/Nabard funded projects in Arunachal where I will be touring next week.

Dear Mr Mardo Ninu,

This has reference to our telephone conversation this afternoon on the above subject.

Seek your assistance for the right contact person in Tezu in Lohit District and Roing in Lower Abong Valley where orange and ginger growers formed a cooperative and doing a good job.

In case of any NGO involvement in this whole exercise, please do let me know.

Am in Tinsukia now and plans to reach Tezu and Roing in the week beginning from 12th November (Mon).

It will be shorter and easier to travel from Tinsukia to Tezu and Roing instead of coming via Ita Nagar.

Am already in touch with District Agriculture/Horticulture departmental heads of Arunachal government for government guest house accommodation in these two districts during my visit.

If your contact can also help me, it will be much appreciated.

Waiting to hear from you,

Date: 6-11-2012

Attn: Capt Pawanexh Kohli, Chief Advisor, NCCD, Ministry of Agriculture, Govt of India

Dear Capt Kohli,

Today visited Mahabir Cold Storage in Tinsukia and spent over 3 hours.

It is the oldest and the largest cold storage facility in Assam, claims Mr Hulas Chand Jain, owner.

His elder brother set up Assam Cold Storage (it was the original name) in 1961-2 in a mad rush to beat the state government to be the first!

It is potato-focused, not because he did not try other stuff. He did with oranges. But the taste did not match the Nagpur variety and there were no takers. He did try flowers, but a small town like Tinsukia did not have adequate demand to service huge population's Pooja and shaadi needs.

Since he is a Jain, a perfect 'no' to meat and fish.

He has two units under Mahabir Cold Storage, funded by NHB

He is keen to expand and negotiating with State Bank of India to add extra cold storage capacity for 2 long years.

Under some pretext or other, paper work is dragging. He's sick and tired.

He's a trader. Buys and sells (potato) from Punjab, West Bengal etc. Leveraging price difference, yes.

Says that cold storage owners may not encourage vegetable/fruit growers because they don't keep the stuff 'longer' in cold storages!

Does it mean, veg and fruit-focused smaller storages – like the one recommended by Chief Scientist Dr Sarat Saikia in Guwahati?

This year, Mahabir CS capacity utilization – 60% vis-à-vis last year's 90%.

Potato cold storages are 'ghost towns': smelly and scary!

He set up 100% PUF insulation chambers as well as thermocole ones.

There are units which have concrete pillars and some with MS Steel support system.

According to him, PUF costs double that of thermocole, but the best in terms of longevity.

The potato season has ended in Oct and hence all units are non-operational at this business enterprise.

Fully aware of Negotiable Warehousing Receipt.

“Never heard from Nabard or NHB for long. Why this sudden interest?” asks he jovially.

Labour does not like air curtains, and prefer split plastic strips. Heard this for the second time over the past 9 days since I began this journey.

Perhaps Guwahati NHB team should fan out once in a while to NHB-funded units to get a hang of ground reality in the North East region..

I was accompanied by thirtyish Dr Rubul Gohain, Agriculture Development Officer from Assam Govt.

It was one of the most fruitful interaction. He answered every single question (close to 90!).

Will be visiting Greenfield Cold Storage tomorrow.

Meeting with the owner is scheduled because the manager felt he could not respond to many questions himself.

Attn: Capt. Pawanexh Kohli, Chief Advisor, NCCD, Ministry of Agriculture, Govt. of India
Dear Capt. Kohli,

Mr Narang Tuni of Arunachal has deputed Mr Bego Ronya, Agriculture Marketing Officer (Mob: 94362 55885) to handle my Inner Line Permit issue with a proviso for 15 days and all-district access.

Mr Ronya called up to convey this message and my ILP should be ready by Friday to enable me travel to Arunachal Sunday as planned.

Meanwhile, Mr S K Singh, Asst. Director, NHB at Guwahati sent a cold storage details funded by NHB. Thanks, Mr Singh!

Indicated to Mr Ronya that I will need accommodation (government guest house) at Tezu in Lohit district for 2-3 days from Sunday. I will use Tezu as my base to visit Roing in Lower Abong Valley and other areas nearby. Local conveyance needed, Mr. Tuni/Mr Ronya!

After Tezu, Roing, I will move to Papum district where Arunachal Valley Cold Storage funded by NHB is situated, as per Mr S K Singh's information. Thereagain, I need a day's stay. And local conveyance. This will be coordinated with Mr Tuni/Mr Ronya.

The final halt in Arunachal will be at Ita Nagar where I will interact with Mr Hag Kojleen, Mr Tuni and Mr.Ronya. Maybe 1-2 days halt. Local transportation and govt guest house accommodation needed.

Mr Surendra Kaul: Request you to link me with Meghalaya and Tripura contacts a.s.a.p. so that I can pursue now onwards..

Mr S K Singh: Kindly prepare a list of NHB funded projects in Meghalaya and Tripura with contact coordinates a.s.a.p.

Date: 7-11-2012

Attn: Mr Narang Tuni, Deputy Director (Horticulture), Govt of Arunachal

Dear Mr Tuni,

This morning I was listening to the audio tape of my interaction with Meramac Senior Marketing Manager Mr Angadi wherein he clearly maintained that the District Agriculture Office in Arunachal is playing a stellar role in procurement in orange and ginger directly and through local NGOs. “We (Meramac) don't engage in direct procurement. They do it,” is how he put it.

Significantly, Mr R K Behera, DGM, Nabard also echoed similar sentiments.

In view of these assessments, I request you to ensure that some meetings with NGOs is being arranged with the help of local District Agriculture Offices at Tezu and Roing definitely and in Ita Nagar as well.

Since there seems to be just one solitary cold storage funded by NHB, I would be interested in knowing the presence of cold storages across Arunachal, not funded by NHB also.

If you can share this list with complete contact details (name of company, name of owner/manager, their landline, mobile, email ids etc), a.s.a.p., we can perhaps chalk out a much more effective programme during my week long stay in Arunachal.

Mr S K Singh: Any contact point of yours in Arunachal will be of immense value. Kindly do the needful.

Look forward to hearing from you,

Dear Mr Tani,

Would like to know/visit these areas in Arunachal on the basis of Mini Mission III objectives/goals:

An interaction with Arunachal Agriculture Marketing Board seniors

College of Horticulture & Forestry at Pasighat – an interaction with the Dean

Upto 2010, a sum of Rs.1,360 lakhs has been spent in West Kamang in marketing initiative. So an interaction with farmers/NGOs etc.

East Silance also received a sum of Rs.1,346 lakhs upto 2010 for the same objective as in item (c). So an interaction with farmers/NGOs etc in this area

Lohit district received Rs.1,261 lakhs. Same as above items (c) and (d)

Under NEC funding, large cardamom and orange plantations have got a lot of support in Jhum land, Restaring, Korapu, Tarak Lungdi in Kurung Kumney district. Interaction with growers, NGOs and of course the AP P Mkg Board team.

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Wednesday, 07 November, 2012 10:10
To: chfdeanpsg@gmail.com; chfdeanpsg@yahoo.com; bnhazarika13@yahoo.co.in
Cc: arunachalhorticulture@yahoo.in; degoronya01@gmail.com; Pawanexh Kohli; 'Shailendra Kumar (Director NCCD)'; nhbghy@gmail.com
Subject: NORTH EAST TRIP: Arunachal - College of Horticulture & Forestry, Pasighat

Attn: The Dean

Sir,

Greetings.

I am currently on a visit to northeast India to study post harvest marketing initiatives on behalf of Ministry of Agriculture.

Am likely to be touring Arunachal next week and hence this mail.

During the course of my interaction with farmers and exporters over the past few weeks, it is time and again pointed out that growers in Arunachal are not well versed in plucking of oranges, plums, kiwi and other fruits. A proper training in plucking with right kind of tools is the need of the hour, is what I am hearing.

I wish to know whether CHF addresses this issue as part of its curriculum?

Does CHF has any role to play as part of Mini Mission III?

If CHF is engaged in any post-harvest activities in the form of education etc, I wish to meet you in Pasighat next week.

Look forward to hearing from you,

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Wednesday, 07 November, 2012 21:02
To: Pawanexh Kohli; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'
Cc: nhbghy@gmail.com; arunachalhorticulture@yahoo.in; rubulgohain12@yahoo.com; degoronya01@gmail.com
Subject: NORTH EAST TRIP: Assam - Interaction with Farmers Management Group @ Tinsukia village

Attn: Capt. Pawanexh Kohli, Chief Advisor, NCCD, Ministry of Agriculture, Govt of India

Dear Capt. Kohli,

You have never met Prafollla Moran and his wife (DSC03587 image). And you will never ever.



They are a 50 plus couple, owning 10 bighas of agricultural land in Habedagaon, Tinsukia, Assam.

Growing cabbage, potato, pulses, raddish, and A bit of tea.

His son Jitu Moran is the President of Lakshmi Pothar Podichalna Samiti (Lakshmi Farmers Management Group) or called shortly Lakshmi FMG! (DSC03597-image Secretary along with President)



Under this set up, over 200 farmers – owning 270 bigha of farm land collectively – trying to get a better price realization in vain.

While paddy dominates 170 bigha, vegetable accounts for 100 bigha.

The village is approximately 3 km away from NH37 linking Guwahati. And the approach road is decent upto a certain length. Then the rest of multiple single lane kacha pathways are unmotorable.

They can't afford cold storage run by big businesses and moreover they are in the heart of Tinsukia city – away from their doorstep.

It is altogether a different story that cold storage owners whom I had met (Mahabir Cold Storage and Greenfield Cold Storage) in Tinsukia over past two days would be glad if these farmers are kept away from them.

Why? "You can't do business with guys because they don't have a long term plan of keeping stuff in cold storage for longer period for better price realization," points out Sanjay Sah, Manager at Greenfield Cold Storage. His 5,285 MT capacity outfit on the Station is focused on potato and eggs to a small extent.

In fact, Greenfield did build smaller multipurpose chambers for cabbage, apple and ginger when the facility was opened in 2007-8. Now all these story only potato or egg.

Why? What happened?

Cabbage rotted away, I reckon due to poor temperature control. Apple became the victim of rat biting and labour stealing. Above all, costing did not work out. So, finito.

Hulas Chand Jain, owner of Mahabir (12,000 MT capacity and the oldest and the largest in Assam), says veg and fruit guys are not dependable. He again is potato focused.

Coming back to the Moran family and Lakshmi FMG, their need is two-fold:

One, they want mini cold storages in their vicinity, not in city. Are they ready to put 50% cost of such a mini cold storage at their farmgate if govt gives 50% funding? Most likely. Sixty percent of their produce is bought by merchants from nearby cities and they sell at a hefty margin. Growers carry their vegetables 100 kg each on bicycle to the nearest

wholesale market (Makam) or if the price is too low, cycle down to Tinsukia market (11 km) anticipating a better price! At times, it is a distress sale. "I can't keep them in my house. They will rot. So sell it at any price," confesses Lakshmi FMG secretary Bhobeshwar Mech.

Two, they resort to sun-drying of cabbage to elongate its life and better pricing little later. But the open sun-drying has pollution consequences. Incidentally all their produce is 100% 'Organic'. They only use compost. No fertilizer. "Actually, we should get a better price for this healthy produce," tells Moran Senior.

Dr Rubul Gohain, District Agriculture Officer, who accompanied me for this interaction says they need a shed with sides covered. Has his seniors broached the issue with their higher ups? Yes, but concedes it has some budgetary issues and that is why this has not progressed.

Met another FMG headed by Turakanta Hati Barooah (DSC3550 image-guy standind forecourt). His group consists of 40 famlies owning 400 bigha and potato, peas, baingan, cabbage, onion besides scented rice. No tea at all. He was known as one of the most 'progressive farmers' in Tinsukia and he had been sent to Punjab, Maharashtra and Bangaluru by state government at three different occasions to study and understudy growing methodologies there. Mini cold storage at the farmgate is what he is aspiring for. He says: enough of helping us grow more. Now help us sell more.



Likely to meet orange growers at their plantations and one more visit to a cold storage.

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Wednesday, 07 November, 2012 21:22
To: arunachalhorticulture@yahoo.in; degoronya01@gmail.com
Cc: Pawanexh Kohli; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; nhbghy@gmail.com
Subject: RE: FW: NORTH EAST TRIP: Arunachal Pradesh - Cold Storage & infrastructure Study for Ministry of Agriculture's NCCD-NCSL, Govt of India

Dear Mr Tani,

Thanks a lot for ILP.

Yes, inter-district movement will be managed by me.

Accommodation at whichever district hq I visit, local conveyance and a junior local district agri/horti official for easy access and to overcome linguistic challenges is needed.

For your info, in Guwahati, Deputy Director S K Sharma visited along with me and in Tinsukia, a junior district agriculture officer was assigned to accompany me

everywhere. In all these cases, this turned out to be good because I can speak Hindi and English only and farmers speak in their own language (assamese). Plus the presence of the local state government official also gives greater confidence for farmers to interact without any suspicion.

Am sure you will do the needful in this regard.

As per plan, I should be in Tezu on Sunday 11 November and kindly let me know my accommodation details and the local contact person to help me move around and interact with growers etc.

Cheers

Date: 8-11-2012

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Thursday, 08 November, 2012 06:39
To: arunachalhorticulture@yahoo.in
Cc: Pawanexh Kohli; 'Shailendra Kumar (Director NCCD)'; dyceasmb@gmail.com; nhbghy@gmail.com; ravikiranmalik@gmail.com; degoronya01@gmail.com
Subject: RE: NORTH EAST TRIP: Arunachal Pradesh - District Agriculture Office role in orange/ginger procurement

Dear Mr Tani,

Thanks for the input.

AAPMB, I understand from your feedback, is not directly involved in procurement and marketing of agri-horti produce.

But certainly they have access to those who procure at the farm gate level.

Hence, I will be grateful if you can link me with the CEO or this Marketing Board or any senior official who can help me meet such middle men whom the Board is to be interacting with.

For instance, in Assam, a similar Agriculture Marketing Board does exist and they also don't do anything directly.

I did meet Mr Dhiren Sharma, Deputy CEO, and Executive Engineer Mr Bulbul Hussain in Guwahati. Post this interaction, another Board official was assigned to accompany me to a couple of projects where the Board is involved indirectly.

Am sure such assistance is possible in Arunachal.

I certainly would like to meet CEO/Head of AAPMB in Itanagar or wherever its office is located.

2) You mentioned Dept of Horticulture has set up it own Marketing Board, though not become functional. I reckon it will have its own officials whom I wish to meet. Kindly facilitate.

3) Cold storage at Tippi: Tks for this input. Will visit this as well as the one identified by Mr S K Singh, Asst Director, NHB, at Guwahati. Surprised that how come this input is missing at NHB, Guwahati that monitors the entire north east region. I request you to arrange for the local district level agri-horti official to visit these two cold storages along with me. I will touch base with Mr A K Purkayastha, Director (Mkg), AAPMB, regarding this cold storage.

I will be visiting Tippi, after my interactions with you and others in Ita Nagar. Plenty of time.

Wherever AAPMB has offices – particularly in the districts which I will be visiting I will be glad to meet them.

4) Kindly indicate the ginger-growing districts in Arunachal.

Dear Mr Rajiv Mallik,

My Assam sojourn is nearing end and moving into Arunachal on Sunday.

I will contact Nabard DGM Anoop Mohan at Ita Nagar. Meanwhile, want to know whether Nabard has done any study on the fruit/floriculture biz prospects in Arunachal like Nabard did on Nagaland?

Also, Mr Bist at Nabard/Guwahati spoke highly about the role played by NGOs in North east.

Since Nabard is deep into rural arena, I will be grateful if these NGO contacts be shared at the earliest.

Am marking a copy of this to Mr Bist also to expedite this.

Any slide presentation or documents on Arunachal will be of immense interest to me as I about to enter there.

Hope to meet you soon.

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Thursday, 08 November, 2012 07:57
To: apedagwh@apeda.gov.in
Cc: Pawanexh Kohli; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; nhbghy@gmail.com; arunachalhorticulture@yahoo.in; degoronya01@gmail.com
Subject: NORTH EAST TRIP: Arunachal Pradesh - Study on Agri-Horti produce marketing initiative for Ministry of Agriculture, Govt of India

Attn: Mr B Barua, Regional Incharge, APEDA, Guwahati

Dear Mr Barua,

Greetings.

Am currently on a study tour of northeastern states to understand the kind of marketing initiatives undertaken by various state and central government as well as other government-owned agencies – including APEDA.

After spending 12 days in Assam, am moving to Arunachal this weekend.

This is where I need your assistance.

From your agriexchange.apeda.gov.in website, I understand you have a cold storage in Bhalukpong, Arunachal. I wish to meet the owners of this multipurpose facility. Kindly provide the contact coordinates.

Is it the same facility monitored by Arunachal Agrimarketing Board? Clarify, please.

Besides this cold storage facility, what other activities APEDA is involved to promote agri-horti industry in Arunachal?

Do you have a rep office anywhere in Arunachal? If yes, give contact details (name, mobile no, email id, landline etc.)

In case APEDA does not have a rep office anywhere in Arunachal, how the Regional Office in Guwahati monitors developments and promotion in this state?

Look forward to hearing from you at the earliest.

Date: 9-11-2012

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Friday, 09 November, 2012 07:25
To: Pawanexh Kohli (NCCD)
Cc: Shailendra Kumar (Director NHM - NCCD); Surender Kaul; nhbghy@gmail.com; arunachalhorticulture@yahoo.in; rubulgohain12@yahoo.com; degoronya01@gmail.com; Sanjeev Chopra
Subject: Re: NORTH EAST TRIP: Assam - Interaction with Farmers Management Group @ Tinsukia village

Dear Capt. Kohli,

State-sponsored farmers' visits focuses more on better farming methods. Absolutely no talk of marketing, confirm farmers.

Maybe a special drive or initiative has to be undertaken to chat up farmers on how to improve their marketing capability with state assistance of course.

Dr Rubul Gohain of Tinsukia department of agriculture meanwhile told that there are more than 500 FMGs in Tinsukia district alone!

Groups comprising of farmers on produce-specific. Paddy, orange, banana, vegetables like that.

There is a co-ordination committee of these FMGs which meets once a month to discuss their issues.

District agriculture officer is always an invitee and he does participate.

Once there is some consensus on any critical issue, they select a sub group which goes to DAO for a detailed discussion.

At this moment, paddy FMG constitute 50%, followed by fruits and vegetables.

Is there a state-wise/district wise data base of such FMGs at Krishi Bhawan?

Almost every meeting of veg and fruit FMG, the pricing of their produce by the middle men and how they lose out becomes a core issue.

For instance, 39-year old orange/passion fruit plantation owner (5 bighas) and a member of Tamuli Bongaon FMG (48 families and 400 bighas) Nagendra Nathneog tells me that he sells 1,000 oranges at Rs.2,300/- to dalals.

Dalals visit farmers during the flowering season and cough up 50% as advance payment. At harvest time, they bring their

own vehicle and carry away the produce after paying the balance - mostly in cash.

Nathneog says, when he visits markets, the same oranges are sold at Rs.6 or 7 each.

He is also aware that orange price that hovers around Rs.30/kg during harvest time shoots up to Rs.70/kg a few months later.

And he laments the fact that he is not benefitting, but the merchant.

What does he need? Help me sell @ the RIGHT PRICE is his desire.

Why can't government fix a particular price - like it does for paddy as Minimum Support Price, he asks.

I am also a farmer growing veg and fruits and rice/wheat/pulse grower is also farmer. Why this disparity, he wants to know.

Farmgate mini cold storage excites him.

This, according to Dr Gohain, is always the buzzword among farmers' fraternity.

Date: 10-11-2012

Dear Mr Tani,

Tentative programme is as under:

11 Nov – Sunday – Arrival in Tezu at night & stay

12 Nov – Monday – Visit to your office and discussion about various activities DHO does in this district with reference to fruit/veg/flower cultivation & your department's regular interaction with farmers in your district.

13 Nov – Tuesday – Diwali Holiday

14 Nov – Wednesday - Visit to farm gates, markets, buying agents (brokers of these agri-horti produce), transportation hub.

15 Nov – Thursday – Visit to Roing for similar activities as spelt out above for Tezu. (Wish to use Tezu as base and go and come back to Tezu instead of asking you to arrange for accommodation/local conveyance in Roing separately).

16 Nov – Friday – Will leave for next destination. (We will discuss and finalise this by Wednesday and intimate Mr Narang Tani in Itanagar to enable him alert the respective DHO for my local accommodation/local conveyance.

With regards,

Date: 12-11-2012

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]

Sent: Monday, 12 November, 2012 09:46

To: Pawanexh Kohli

Cc: 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; nhbghy@gmail.com

Subject: NORTH EAST TRIP: Assam - A few thoughts

Dear Capt. Kohli,

The past fortnight spent in Assam revealed a few things which I would like to share with you:

Farmers at local level are very much concerned the raw deal they get on the market front. They look for 'sell more' tips and assistance than 'grow more'.

Rural road connectivity is not satisfactory. Bumpy, kacha, muddy pathways.

Power on the farm gates is no issue becoz they use power for pumping ground water. Homes are electrified.

Several farmer management groups function – product and location specific. Regular monthly co-ordination committee of FMGs take place with DAO/DHO present.

Farmers sent on awareness programme to other states to know best production techniques. But they ask for 'how-to=market' awareness and assistance.

DAOs perhaps are not equipped.

Agriculture marketing board is more focused on creating infrastructure – drying yard, auction platforms.

No focus on 'marketing' per se.

Chorus of demand before DAO for farmgate level mini cold storages.

City-based cold storages are potato-focused and price leveraging, captive trader players. No interest in assisting farmers.

NHB regional office plays more of administrative/propagation role. Maybe inducting 'marketing' professionals into it be considered.

NHB regional office need presence in all state capitals for greater interaction at regular interactions.

Greater coordination among NHB, food processing, agrimarketing boards, NERMAC, Nabard be considered at state/district level.

That's for now.

Reached Tezu last evening and put up @ Circuit House.

Action will begin today and after a short one day Diwali break will resume Wednesday again.

DHO officials whom I last night, gave a run down on horti scene. More in the offing.

Cheers

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]

Sent: Monday, November 12, 2012 8:30 AM

To: 'sohliya@gmail.com'

Cc: Pawanexh Kohli; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'

Subject: NORTH EAST TRIP: Meghalaya - Study of post-harvest marketing initiative under Ministry of Agriculture, Govt of India

Dear Mr Sohliya,

Good morning from Tezu, Arunachal Pradesh.

This has reference to our tele conversation last week on the above subject.

Under the Ministry of Agriculture's newly constituted National

Committee on Supply Chain & Logistics, I have been touring the north east since Oct 28 to study the various efforts made at the state level to improve the marketing initiatives for local growers of agri-produce.

As a Member of the Committee, I had visited several districts in Assam in cooperation with state horticultural departments at state hq and district level for farmer interaction at farm gate level and visits to cold storages in the state.

I had reached Arunachal Pradesh and will be here for next 10 days to examine/explore the same arena.

I plan to reach Shillong, Meghalaya around 25th Nov.

In this regard, I got your contact coordinates from Capt. Pawanexh Kohli, Chief Advisor to NCCD, Ministry of Agriculture, New Delhi.

I need assistance in two specific areas:

- 1) Govt guest house accommodation and local conveyance in Shillong and other districts of Meghalaya when I visit.
- 2) Request for a junior officer to accompany me on my farm gate/cold storage visits.

Of course, I also wish to meet the Meghalaya Agriculture Marketing Board officials or similar set ups that help farmers in post-harvest front.

I shall try to reach to the Secretary of MSAMB (09436104582) this week.

Meanwhile, kindly forward this mail to relevant heads of department who will be able to assist me in this regard.

Will certainly meet your goodself as well when am in Shillong.

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Monday, November 12, 2012 9:46 AM
To: 'Pawanexh Kohli'
Cc: 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'
Subject: NORTH EAST TRIP: Assam - A few thoughts

Dear Capt. Pawanexh Kohli,

The past fortnight spent in Assam revealed a few things which I would like to share with you:

- (a) Farmers at local level are very much concerned the raw deal they get on the market front. They look for 'sell more' tips and assistance than 'grow more'.
- (b) Rural road connectivity is not satisfactory. Bumpy, kacha, muddy pathways.
- (c) Power on the farm gates is no issue becoz they use power for pumping ground water. Homes are electrified.
- (d) Several farmer management groups function – product and location specific. Regular monthly co-ordination committee of FMGs take place with DAO/DHO present.

- (e) Farmers sent on awareness programme to other states to know best production techniques. But they ask for 'how-to=market' awareness and assistance.
- (f) DAOs perhaps are not equipped.
- (g) Agriculture marketing board is more focused on creating infrastructure – drying yard, auction platforms. No focus on 'marketing' per se.
- (h) Chorus of demand before DAO for farmgate level mini cold storages.
- (i) City-based cold storages are potato-focused and price leveraging, captive trader players. No interest in assisting farmers.
- (j) NHB regional office plays more of administrative/propagation role. Maybe inducting 'marketing' professionals into it be considered.
- (k) NHB regional office need presence in all state capitals for greater interaction at regular interactions.
- (l) Greater coordination among NHB, food processing, agrimarketing boards, NERMAC, Nabard be considered at state/district level.

That's for now.

Reached Tezu last evening and put up @ Circuit House.

Action will begin today and after a short one day Diwali break will resume Wednesday again.

DHO officials whom I last night, gave a run down on horti scene. More in the offing.

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Monday, November 12, 2012 9:53 AM
To: 'Arunachal Horticulture'
Cc: 'dholohit11@gmail.com'; 'degorynya01@gmail.com'; 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'
Subject: NORTH EAST TRIP: Arunachal - Transport Subsidy

Dear Mr Nrang Tani,

Greetings.

Thanks for the warm welcome at Tezu.

Sir, in one of your mails, you spoke about transport subsidy as a sop for promoting horti products in Arunachal.

I happened to read an editorial in *Seven Sisters Post*, one of the prominent English dailies in your region.

Under the title, Cashing In On Subsidy, it says:

"The cases of raw material based industrial units especially agri-based units seem not to have received the priority attention they deserve"

Will look forward to hearing your thoughts on transport subsidy and its utilization for promoting horti produce when we catch up next week perhaps in Itanagar.

Cheers,

Date: 14-11-2012

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Wednesday, 14 November, 2012 05:53
To: Pawanexh Kohli; 'Shailendra Kumar (Director NCCD)'; nhbghy@gmail.com
Cc: 'Arunachal Horticulture'; dholohit11@gmail.com
Subject: NORTHEAST TRIP: Arunachal - Tezu circle

Dear Capt. Pawanexh Kohli,

During the farmers interaction arranged by Mr Rahman in Tezu, orange and vegetable growers have precisely spoke on lack of road connectivity as well as absence of marketing initiative from govt side as major challenges.

Mr Rahman, who had spent part of his career in West Kameng and several other districts did turned the spotlight on kiwi growers' plight as well.

This Friday/Saturday I would have completed Lohit district touchpoints (Tezu, Roing, Wakro etc) and head for Itanagar for a face to face interaction with you and Mr Purkasyastha of Marketing Board (unable to reach him yet due to network challenge) Monday mostly. Then head for Ziro in Lower Subansiri district which you had mentioned in the below mail and spend a day interacting with farmers etc, to be arranged by DHO there. Then to West Kameng district - Rupa, Sinchung, Dirang on the flower and kiwi front.

Plus the visit to two cold storages - one funded by NHB and another by state marketing board.

Mr Saifour Rahman, Agricultural Development Officer (16 years in Arunachal served in various districts), ably assisted by Horticultural Field Assistants Mr Bindeswar Singh and Mr Kul Kamal Pande (both with over 25 years experience in horti area of Arunachal), gave an overview of horticulture scenario in the state in general and two circles (Tezu and Sinpura) under his jurisdiction.

Gone on a farmers' meet – orange & black pepper growers and vegetable growers at 3 different locations.

Observations:

No farmer knows what is his investment cost in growing whatever he does. No accounts maintained. Everything mental.

Get Rs.1/per best quality orange if the orchard is on the edge of rural road. Less than Rs.1 if collection at farmgate involves movement by hired labour.

Vegetable farmers tried to take it to Tinsukia/Assam (the nearest market at 190 km distance) instead of selling in local market and thru middlemen but found uneconomical.

Tea growers (houses have backyard tea garden) gave up due to connectivity issues to Tinsukia. During monsoon and flooding in Mighty Brahmaputra, your movements are zilch. And routing via Parasuram Kund (extra 50 km from Tezu) has its own landslide and other challenges. If the plucked tea leaves are not delivered within 24 hours, buyers in Tinsukia don't take it. It is a sheer waste. Hence farmers gave up tea growing.

Middlemen/transporter is planned this week, post Diwali holiday.

Ginger and blackpepper also grows and 'take it or leave it' challenge to growers from buyers/middlemen.

Pomelo fruits (water melon size, but orange type citrus and sweetish) grows aplenty, but not tapped.

No farmer here talks about mini cold chain at farmgate level.

Farmers, surprisingly, talk a lot about 'quick evacuation' once harvested. But connectivity is the BIG issue.

Some pest attack at times wipes out several hundred orange trees. No remedy so far, says farmers.

District Horti office does provide some occasional remedy. But that's not sufficient, it appears.

Perhaps calls for better farming inputs.

Dear Capt. Pawanexh Kohli,

First things, first. Arunachal seems to be on the right path – on paper at least at this juncture. If what I heard at Tezu office of the state's horticulture department at this district (Lohit district) level, am sure Arunachal has began to mull over 'marketing' and give equal weightage to it instead of just 'grow more' strategy.

Let me explain.

Step 1: District Level Marketing Committee is being conceived. This will consist of two progressive farmers (criteria being he/she must hold less than 5 hectares and grow fruits, vegetables and spices too; two traders/buyers of agri-hortiproduce; one bazaar secretary representing co-operative society interests; and four members to be nominated by government: of this four, one will be from panchayat level, three HDOs. This 9-member committee will be headed by DHO and he will be the nodal officer/marketing officer at the District office. One of the HDOs will be Assistant marketing officer. Bye-laws framed and bank account about to be opened.

Step 2: Crop-wise growers' association is being contemplated. Tezu district has 222 villages. Tezu's 41 villages and Sunpura's 31 villages fall under Agriculture Development Officer Mr Safiour Rahman whom I am interacting with. Crop-wise growers' association is being considered because composite growers' association will have less attraction from farmers' perspective. Focus on crop and their level of interest and participation will be greater, it is believed.

Step 3: Creation of packhouses at 10 locations each admeasuring 9 x 6 metres is the next logical step where produce will be collected and graded. In Wakro (40 km away from Tezu district hq), nicknamed as the Centre of Excellence for oranges, is expected to have 15 packhouses. Spots for packhouses have been already identified and the

detailed proposal, under Mini Mission-III of NHM has already reached state capital and NHB, Gurgaon office and NHB, Guwahati regional office and Dy DG-cum-Nodal Officer, HMNEH, Directorate of Horticulture, Govt of Arunachal. (Letter No. LHD-40-2012 dt 6 Nov 2012).

Step 4: There is a great deal of importance and concern over lack of 'approach roads' in Tezu. Rightly so. Growers will be able to send/bring their produce to plain vanilla packhouses ONLY if there is road connectivity. It is pointed out that under Prime Minister's Gram Sadak Yojana villages that has at least 1,000 people/homes ONLY will be eligible for rural road connectivity. On the contrary, it is rightly stressed that sheer population-basis is not advisable. Instead, the necessity for rural road connectivity be linked to 'economic activity' as well. For instance, several villages in Arunachal have lot of economic activity, but do not meet the 1,000 people/home criteria. "Economic roads" is what the request for. I second that.

Step 5: Next logical step is to rope in big buyers for direct sale from pack-houses thus eliminating the middlemen menace which is denying the right price for kisans. An MOU is being conceptualised. Yes, it will have everything including dispute settlement mechanism.

Never heard such cogent and pragmatic approach so far.

Yes, all these are in talk or discussion stage. What interests me is the level of awareness on how to help farmers "sell more" and at the "right price" at the district and circle levels.

Am sure, some of the best practicing states have something more to offer. Worth evaluating and distilling them for implementing in states where such thinking/mind set change is yet to develop.

Cheers

Dear Capt. Pawanexh Kohli,

Mrs Mantulu Tayang (See picture) owns 30 hectares and grows 7,500 orange trees. Her orchard is perched on a well built rural road. Think it is a Prime Minister Gram Sadak Yojana offering. It's 5 p.m. and pitch darkness has set in.

With an aid of a powerful torch, she guides our Bolero into the forecourt of her tin-roofed, wooden house built on stilts.

Cows and pigs greet us with their respective 'moohs' and 'grrrs'.

We were supposed to meet around 3 p.m. in daylight, but held up at another farmgate of vegetable grower 8 km away. Hence the delay.

Meanwhile, her hubby has scooted leaving this portly lady to handle us.



Her story is same as what I heard from Bachem So Tayang, 38-year "progressive farmer" (as described by Agriculture Development Officer Mr Sirafiour Rahman at DHO, Tezu) a few hours ago at his Tazugam farmgate high up in the mountains where he looks after 20,000 orange trees spread over 80 hectares.

As we leave, she poses this question:

"Year after year, you sarkari officers get a hike in your salary. We produce year after year and we either get the same price or less than the previous year!"

Rahman and company guffaws.

She gets paid Rs.1 per best quality orange.

I want to sell to distant market. But where is the road to cross the Mighty Brahmaputra? she asks knowing fully well that it does not exist.

Rahman interjects by saying that a bridge is coming up fast to cross over the Brahmaputra near Tezu which will help farmers like Mantulu Tayang and Bachem Tayang to try selling in a distant market.

Plus the Asian Highway Network that will create interdistrict road network (it does not exist now. To move from one district to another within Arunachal, you have to exit to Assam and reenter!!!).

Future is bright, sure...

Cheers

**Attn: Mr P K Purkashtya, Director (Marketing)
Arunachal Agriculture Marketing Board, Itanagar
(96121 59494)**

Dear Mr Purkashtya,

Greetings.

This has reference to our telephone conversation today on the above subject.

Sir, I am currently a study tour of post-harvest marketing initiatives to agri-horticulture growers in North Eastern states.

This study tour is being conducted on behalf of Ministry of Agriculture, Govt of India.

Past fortnight, I was in Assam visiting farmgates (orange, pomelo, ginger growing areas) for interaction with farmers, cold storage facilities and Agriculture Marketing Board officials.

Now I have come to Tezu in your state visiting farms of orange, ginger, large cardamom, pine apple, etc.

I will be reaching Ita Nagar the week starting from 19 November.

I wish to meet you in person to understand post-harvest marketing initiatives being carried out by your Board.

Shall contact you once I reach Ita Nagar.

Dear Capt. Pawanexh Kohli,

One thing that clearly emerges from my past 20 days stay in northeast is that the simple act of food processing giants (jam and jelly makers to be specific) buying directly from farmgates will go a long way in meeting their CSR commitment more meaningfully.

Their Buyers should be asked to buy directly from farmgates instead of through middlemen.

Big buyers (read corporate) be engaged constructively by the government at federal and state level.
Yes, it is a fact that growers have not developed a taste for cooperative style of function like in Maharashtra.

If Arunachal's blueprint for district level marketing committee fructifies and implemented/ propagated well and accepted by farmers, it will be a better day for arunachal farmers.

Growers' short term financial needs are mostly met by middlemen in the form of advances

This way, growers get into a 'bond' and unable to extricate themselves from the clutches of middlemen.

Arunachal's Tezu DAO Mr Rahman's insistence that only those buyers registered with district level marketing committee be permitted to trade sounds interesting.

Of course, this can be made possible through the full cooperation of district administration. It is just not the baby of agri-horti department alone.

The skewed buyer-seller relationship at farmgate is necessary for genuine redistribution of income or wealth produced by growers at far flung places.

On a quirky note, one can say that wealth is definitely generated by buyers/middlemen milking farmers. The net is aggregate wealth creation. At this juncture, this is happening at the cost of growers.

In a recharged and realigned mode contemplated can bring lot more parity and justice to those kisans.

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]

Sent: Wednesday, November 14, 2012 5:52 AM

To: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'

Cc: 'dholohit11@gmail.com'; 'Arunachal Horticulture'

Subject: NORTH EAST TRIP: Arunachal Pradesh - Tour Report 1

Dear Capt. Pawanexh Kohli,

Happy Diwali!

- 1) Mr Saifour Rahman, Agricultural Development Officer (16 years in Arunachal served in various districts), ably assisted by Horticultural Field Assistants Mr Bindeswar Singh and Mr Kul Kamal Pande (both with over 25 years experience in horti area of Arunachal), gave an overview of horticulture scenario in the state in general and two circles (Tezu and Sinpura) under his jurisdiction.
- 2) Gone on a farmers' meet – orange & black pepper growers and vegetable growers at 3 different locations.

Observations:

- a) No farmer knows what is his investment cost in growing whatever he does. No accounts maintained. Everything mental.
- b) Get Rs.1/per best quality orange if the orchard is on the edge of rural road. Less than Rs.1 if collection at farmgate involves movement by hired labour.
- c) Vegetable farmers tried to take it to Tinsukia/Assam (the nearest market at 190 km distance) instead of selling in local market and thru middlemen but found uneconomical.
- d) Tea growers (houses have backyard tea garden) gave up due to connectivity issues to Tinsukia. During monsoon and flooding in Mighty Brahmaputra, your movements are zilch. And routing via Parasuram Kund (extra 50 km from Tezu) has its own landslide and other challenges. If the plucked tea leaves are not delivered within 24 hours, buyers in Tinsukia don't take it. It is a sheer waste. Hence farmers gave up tea growing.
- e) Middlemen/transporter is planned this week, post Diwali holiday.
- f) Ginger and blackpepper also grows and 'take it or leave it' challenge to growers from buyers/middlemen.
- g) Pomelo fruits (water melon size, but orange type citrus and sweetish) grows aplenty, but not tapped.

No farmer here talks about mini cold chain at farmgate level.

Farmers, surprisingly, talk a lot about 'quick evacuation' once harvested. But connectivity is the BIG issue.

Some pest attack at times wipes out several hundred orange trees. No remedy so far, says farmers.

District Horti office does provide some occasional remedy. But that's not sufficient, it appears.

Perhaps calls for better farming inputs.

That's all for now.

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Wednesday, November 14, 2012 5:52 AM
To: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'
Cc: 'Arunachal Horticulture'
Subject: NORTH EAST TRIP: Arunachal - Status Report-1

Dear Capt. Pawanexh Kohli,

First things, first. Arunachal Pradesh seems to be on the right path – on paper at least at this juncture. If what I heard at Tezu office of the state's horticulture department at this district (Lohit district) level, am sure Arunachal has begun to mull over 'marketing' and give equal weightage to it instead of just 'grow more' strategy.

Let me explain.

- 1) Step 1: District Level Marketing Committee is being conceived. This will consist of two progressive farmers (criteria being he/she must hold less than 5 hectares and grow fruits, vegetables and spices too; two traders/buyers of agri-hortiproduce; one bazaar secretary representing co-operative society interests; and four members to be nominated by government: of this four, one will be from panchayat level, three HDOs. This 9-member committee will be headed by DHO and he will be the nodal officer/marketing officer at the District office. One of the HDOs will be Assistant marketing officer. Bye-laws framed and bank account about to be opened.
- 2) Step 2: Crop-wise growers' association is being contemplated. Tezu district has 222 villages. Tezu's 41 villages and Sunpura's 31 villages fall under Agriculture Development Officer Mr Safiour Rahman whom I am interacting with. Crop-wise growers' association is being considered because composite growers' association will have less attraction from farmers' perspective. Focus on crop and their level of interest and participation will be greater, it is believed.
- 3) Step 3: Creation of packhouses at 10 locations each admeasuring 9 x 6 metres is the next logical step where produce will be collected and graded. In Wakro (40 km away from Tezu district hq), nicknamed as the Centre of Excellence for oranges, is expected to have 15 packhouses. Spots for packhouses have been already identified and the detailed proposal, under Mini

Mission-III of NHM has already reached state capital and NHB, Gurgaon office and NHB, Guwahati regional office and Dy DG-cum-Nodal Officer, HMNEH, Directorate of Horticulture, Govt of Arunachal Pradesh. (Letter No. LHD-40-2012 dt 6 Nov 2012).

- 4) Step 4: There is a great deal of importance and concern over lack of 'approach roads' in Tezu. Rightly so. Growers will be able to send/bring their produce to plain vanilla packhouses ONLY if there is road connectivity. It is pointed out that under Prime Minister's Gram Sadak Yojana villages that has at least 1,000 people/homes ONLY will be eligible for rural road connectivity. On the contrary, it is rightly stressed that sheer population-basis is not advisable. Instead, the necessity for rural road connectivity be linked to 'economic activity' as well. For instance, several villages in Arunachal have lot of economic activity, but do not meet the 1,000 people/home criteria. "Economic roads" is what the request for. I second that.
- 5) Step 5: Next logical step is to rope in big buyers for direct sale from pack-houses thus eliminating the middlemen menace which is denying the right price for kisans. An MOU is being conceptualised. Yes, it will have everything including dispute settlement mechanism.

Never heard such cogent and pragmatic approach so far.

Yes, all these are in talk or discussion stage. What interests me is the level of awareness on how to help farmers "sell more" and at the "right price" at the district and circle levels.

Am sure, some of the best practicing states have something more to offer. Worth evaluating and distilling them for implementing in states where such thinking/mind set change is yet to develop.

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Wednesday, November 14, 2012 5:16 PM
To: 'akp2005.aru@yahoo.com'
Cc: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'; 'Arunachal Horticulture'
Subject: NORTHEAST TRIP- Arunachal Pradesh - Study of post-harvest marketing initiative in NE states under Ministry of Agriculture, New Delhi

**Attn: Mr P K Purkashtya, Director (Marketing)
Arunachal Pradesh Agriculture Marketing Board,
Itanagar (96121 59494)**

Dear Mr Purkashtya,

Greetings.

This has reference to our telephone conversation today on the above subject.

Sir, I am currently a study tour of post-harvest marketing initiatives to agri-horticulture growers in North Eastern states.

This study tour is being conducted on behalf of Ministry of Agriculture, Govt of India.

Past fortnight, I was in Assam visiting farmgates (orange, pomelo, ginger growing areas) for interaction with farmers, cold storage facilities and Agriculture Marketing Board officials.

Now I have come to Tezu in your state visiting farms of orange, ginger, large cardamom, pine apple, etc.

I will be reaching Ita Nagar the week starting from 19 November.

I wish to meet you in person to understand post-harvest marketing initiatives being carried out by your Board.

Shall contact you once I reach Ita Nagar.

Date: 16-11-2012

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]

Sent: Friday, November 16, 2012 5:32 AM

To: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'

Cc: 'Arunachal Horticulture'; 'dholohit11@gmail.com'; 'safior.rahman@gmail.com'

Subject: NORTHEAST TRIP: Arunachal - Why not use Brahmaputra as a multimodal transport tool?

Dear Capt. Pawanexh Kohli,

Over the past five days @ Tezu, an interesting idea popped out during the interaction at post-Diwali get together hosted at one of Horti Dept female executive's home.

Mr Safior Rahman, HDO, Tezu and Mr Soto Thalai, HDO, Anjar (neighbouring district again) popped the above question viz., why not use Brahmaputra as a multimodal transport tool?

Their logic is simple:

Brahmaputra flows through Arunachal Pradesh in Lohit district touching Tezu and then enters Assam to flow via all important points such as Dibrugarh, Jorhat, Golaghat etc and of course, Guwahati. In fact I saw the Inland Waterways Authority of India port from the Saraghati Bridge over Brahmaputra in Guwahati.

Growers in Tezu over the week have invariably pointed out poor transportation infrastructure as one of the reason why they can't take their produce – orange, pineapple, large cardamom, ginger, fresh vegetables etc – to distant markets and therefore forced to sell to brokers/middlemen.

Brahmaputra, am told, is navigable. But it needs desilting. There seems to be a Brahmaputra Board (the Ganges Authority) which perhaps be probed on.

Mr Rahman pointed out that usage of Brahmaputra will serve twin purposes:

- 1) Desilting and usage of this river will reduce the water level and reduce the massive damage to the entire north east due to flooding and the consequent huge cost of post-damage

management. After the September 2012 flooding, many orange gardens have been hit in Wakro – the largest circle in Arunachal that boasts of 250 acres plus orange orchards. Mr Ramashankar Singh, HDO, Wakro took us on an inspection tour of one such spots where the entire orchard hosting more than 500 orange trees is 'flooded' with massive riverbed stones every inch almost. Though fruits have survived, cleansing operation will be massive and future of this garden is doubtful, if Mr Singh is to be believed.

- 2) Primarily, Brahmaputra can be a good 'environmental friendly' additional transportation module for moving both men and materials. If I recall, Prime Minister has spoken about the usage of inland waterways for better logistic support.

Significantly, buyers in Wakro who transport oranges to Silchar, Assam (more than 700 km) by road for value addition in the form of packaging and then export to Bangladesh etc. complained of huge loss of damage in transit. That's because of the bumpy ride on road due to poor road condition.

A good idea to mull over.

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]

Sent: Friday, November 16, 2012 5:37 AM

To: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'

Cc: 'Arunachal Horticulture'; 'dholohit11@gmail.com'; 'safior.rahman@gmail.com'

Subject: NORTHEAST TRIP: Arunachal - Tezu/Wakro produce, Horti train @ Tinsukia

Dear Capt. Pawanexh Kohli,

Here's another idea.

Tinsukia is the nearest Indian railway terminal to Tezu & Wakro, large orange growing region in Arunachal.

As well know, the recently introduced Horti train touches upto Kolkata.

Kolkata is well linked with Guwahati and beyond upto Tinsukia.

Horti trains, we know, is ventilated and 'insulated' so that it is able to push Busaval, Maharashtra bananas to east India.

Why not try Horti trains to try pushing oranges from Tinsukia to Silchar or Karimgang in Assam, where actual processing or value addition of Arunachal Pradesh happens?

Yes, it is seasonal (Nov-December) for oranges.

But round the year, there is something or other to push from Arunachal.

For instance, litchi in June/July.

Mr Safior Rahman, HDO, Tezu in his discussion the proposed District Level Marketing Committee (pending approval at the state hq level) wherein he spoke about

MOUs with big buyers (actual users such as Unilever, Dabur, etc). They can be encouraged to use Hortitrains from Tinsukia.

If Indian Railways/Concor has refrigerated ones (reefers), farm freshness can be ensured.

The quantity being evacuated by 9 tonne lorries from Wakro to Silchar/Karimganj in Assam on Indo-Bangladesh is pretty huge. (see attachment).

Mr Rahman of Tezu promised to provide such a detailed productwise info.

Date: 19-11-2012

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]

Sent: Monday, November 19, 2012 5:03 AM

To: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'

Cc: 'Arunachal Horticulture'; 'roinghortiofficer@gmail.com'; 'dholohit11@gmail.com'; 'safior.rahman@gmail.com'; 'balom-06@yahoo.com'

Subject: NORTH EAST TRIP: Arunachal - Roing - Goodbye, Mr Minnonge Linggi!

Dear Capt. Pawanexh Kohli,

Minonge Linggi (**see attachment**) takes the cutter out of its sheath and knocks off the hard and long sharp needle like thorn on the branches of one of thousands of orange trees in his 'bagan' (orchard).

Most of these thorns were at his level and therefore do not require any exemplary 'swishing' action scene.

Just a single movement and a certain 'death' to the needle.

Ten minutes ago, we landed up at his farmgate on our way back from Dature Muili's beautifully landscaped 30 hectare (270 trees x 1 hectare) orchard 12 km away from Roing marketsheds where I stay.

"Mino," Grafter Dhanpal Singh, working for 17 long years at DHO-Roing, began shouting as we squeezed our way through the bamboo-makeshift farmgate. These are not pucca gates, but half a dozen long bamboo poles tied to two fixed points at one foot distance from ground level. If you want to enter, you are expected to untie one or two bamboo poles and refix the same when you exit out.

"Aao" (come, come!), a shout emanates out of nowhere.

Who is he? How does he look like? I keep wondering.

There are traces of hay lying at a square patch 100 metres from the farmgate as we walk down. Lot of oranges, left behind by the truck for whatever reason, are lying all round. Some are crushed. Some are bruised.

Dhanpalji says it is indication, "evacuation" is happening. That's harvesting has begun at Mino's 'angan'.

One of the most clumsiest farms I have encountered over the past 48 hours as Dhanpal & HDO Rangmin Sora had taken me on rounds.

Particularly when you return from a well manicured and scenic location fit for a Bollywood romantic song, Mino's farm disappoints. Reminds me of Ram Gopal Varma's

scary sandalwood smuggler Veerappan kind of foresty flicks.

Fallen massive tree trunks, cooking marks visible everywhere.

"Kahaon ho?" a voice ricochets again from nowhere. Yes, it is Mino. He's trying to find whether we are lost and needs fresh direction.

In case Dhanpalji led us the wrong path, am sure, now the direction from which the voice rose helps me quietly navigate in the right direction.

Still, we reach an empty 4 feet raised platform on stilts. Several empty bottles greet.

Suddenly, we notice a figure around at 150 metres distance onto our right.

"There he is," says Rangmin Sora and we move towards him.

Meanwhile, we had at least two farm fresh oranges tucked inside our empty bellies right from farmgate.

Dhanpal and Sora's expert eyes scan the horizon looking for still unharvested but good oranges and plucked for instant gratification.

Now we are in Mino's presence where he is trimming a tree.

Dhanpal and Mino exchange a few words. Yes, the orchard owner is getting to know who I am and my purpose of this visit.

"Namaste" and I shake hands with him.

"Kya marketing hai? I sold my angan for a fixed price. I have no time and energy to transport them to market. Even if I wish, these goons will not permit me. Why take risk? Am happy with I get. Even if it is one Rupee per fruit," he tells me with no emotion.

I try to prod him with "Don't you feel cheated that they buy dirt cheap and sell the same orange for 5 or 7 rupees in the market hardly 3 km away from your angan?"

"Look, you have seen the orchard. I work single handedly walking up and down it."

What about labour?

"What labour? Am the only labour and malik. When needed some of my family members come. Otherwise, am all alone," says he matter of factly.

What about his children?

"Oh...They are studying in Bangalore.... Engineering."

Will they take up responsibility from him when they return and relieve him of work pressure?

"What pressure? I enjoy what am doing."

Then turning to Dhanpalji, he is engaged in talking about general orchard-related queries.

Dhanpal and Sora are quietly munching their third orange and I on my second still.

Mino reminds me of a fatter version of Anil Kapoor in his 'Mr India' role. Same kind of topi. Unshaved face.

Dirty track suit.

A crossbelt to hold his cutter and its sheath.

Pock marked face.

A perpetual smile.

I am reminded of a friend's remark at Nashik a few weeks ago while we were driving through a vineyard.

He told me, "never estimate a person's worth by his attire. He may walking on these kucha roads without a chappal, but he is a crorepati, thanks to his table variety grapes export."

Is Mino a crorepati? I wanted to ask, but restrain myself.

Mino walks us back to our vehicle outside the farmgate.

Almost 100 oranges are dumped into the DHO vehicle with a request to Dhanpalji that these fruits be distributed to DHO staff.

He thrusts 4 lovely oranges into my palms and says, "You will like it. Very tasty."

I thank him.

As our vehicle gears up for a few metres of uphill drive to reach the motorable road, I watch Mino on the rearview mirror fixing the farmgate bamboos.

Exit for us and re-entry for him back into his seamless orangey world.

Goodbye, Mr Mino!

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Monday, November 19, 2012 5:08 AM
To: 'drista@rediffmail.com'; 'drpuluroing@gmail.com'
Cc: 'Arunachal Horticulture'; 'roinghortiofficer@gmail.com'; 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'; 'balom-06@yahoo.com'
Subject: NORTH EAST TRIP: Arunachal - Roing - Grower Interaction

Attn: Dr Ista Pulu, MBBS, DGO, Senior Gynaecologist, District Hospital, Roing

Dear Dr Pulu,

Thanks for the valuable time you had taken off from your busy schedule to discuss orange/ginger growers' concern in Roing circle of Lohit District on Sunday.

It was heartening to meet a first generation Idu gynaecologist practicing in Roing and owning orange orchard.

I appreciate your candid views on the shy or reluctance on the part of Idu community that dominates orange growers in Roing to step out into the market to negotiate price of their produce.

Equally interesting was your attempt to sell ginger load in rail bogies through Dibrugarh to Haryana traders for two

consecutive years but how their alleged cheating led to stopping altogether.

Like everyone else, you also harped how transportation to evacuate your produce from Roing to Tinsukia/Dibrugarh is the biggest bugbear for growers like you.

Extortion by a variety of people right from Shantipur border checkpoint to Brahmaputra crossing and the ghat section passage is a big pain and drain.

Yes, buyers try to extract this payment out of growers like you by giving the least price.

Your dilemma on pricing is understandable: to sell for a 'lumpsum' without any fruit count or to go for fruit count at a particular price.

Transport subsidy directly from DHO to orange etc growers is what you are advocating, besides improving the road connectivity and reducing the pain inflicted on the goods movement by vested antisocial elements.

Dr Pulu, you are not the only one to share the common concern: what's future for orange cultivation if the next generation pursuing higher studies in mainland India and looking for job openings there, instead of taking orange growing business to greater heights.

Once again, thanks a lot for everything.

You are most welcome your thoughts on a regular basis with me.

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Monday, November 19, 2012 5:34 AM
To: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'
Cc: 'Arunachal Horticulture'; 'dholohit11@gmail.com'; 'safior.rahman@gmail.com'; 'roinghortiofficer@gmail.com'
Subject: NORTH EAST TRIP: Arunachal - Roing - Mr Chiliko Meto

Dear Capt. Pawanaexh Kohli,

Remember my commitment to tell you a story about Mr Meto? Here it is....

Yes, his office-cum-residence near my hotel is the place where I noticed a Planning Commission Report on Inclusive Growth and he dwelt at length on panchayati raj in good English Sunday early morning.

He has 3000 plants spread over 10 hectares in Balali village – some 30 km away from Roing DHO.

The drive is full of adventure: you drive on Roing-Tezu Highway (4 lanes) being built and hope to be fully functional by 2014 perhaps for 45 minutes.

Ashok Leyland dumpers and tippers carrying Borders Road insignia ply on this patch and casual labour at work even on a Sunday.

A few kilometers after the Roing Govt Nursery, you take a right turn and the adventure begins...

Our Gypsy has to negotiate boulders, fast running streams and tiny villages dotting the so-called highway and 'U'

shaped roads between two concrete culverts/bridges at regular intervals. It was a see-saw ride.

One's bones are literally rattled at the end of this journey.

Suddenly, Mr Meto – Chairperson of Zilla Parishad Committee, Lower Dibang Valley Dist, announced that we have arrived at his orchard.

"Have you ever watched harvest?"

Nope. Not at all, I responded.

"Now see for yourself. Three days ago, I sold my orchard to Bihari Gowri Shankar (buyer who sells it for Karimganj)," he said.

"What price?" demanded Grafter Dhanpal Singh, a 17 year veteran and who's intimacy with each grower's family is to be seen to be believed.

He was with us on the ride alongwith Nepali driver Sam Bahadur.

Mr Meto was so enthusiastic to show the harvesting of his oranges, he jumped into the driver's seat and drove full distance – thus pushing Bahadur to the back seat!

"What price?" repeated Dhanpalji.

"70 paise per fruit," said the fiftyish Meto proudly.

"What?" screamed Dhanpalji his jaw dropping.

"Yes. 70 paise," repeated Mr Meto.

"When?"

Two days ago... Why are you asking?" Meto to Dhanpalji.

"So-and-so sold his fruit at Re.1.60 yesterday," said Dhanpal.

For a few seconds, there was a dead silence.

"Sirji, your loss is in lakhs," said Dhanpalji.

Can he renegotiate his price from 70 paise to 1.60 paise per fruit? I asked Meto.

In a measured tone, Meto said: "Once a word is given, it is over. We don't maintain written agreements. Everything is oral and we respect our commitment."

Next moment, he walked briskly towards the gang of Bihari Gowri Shankar's boys (more than a dozen) plucking oranges from Meto's orange tress for third day consecutively.

"Come over. Would you like to climb this ladder and try plucking?" Meto called out.

I obliged him. (see pix)

Never once, Meto expressed remorse at being taken for a ride by Bihari Gowri Shankar.

He was graceful.

"I will be a bit more careful in future and this time, I will ensure no cheating by buyers at counting," is all he said on our way back.

Incredible India! Things like this happen everyday somewhere or other.

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]

Sent: Monday, November 19, 2012 5:34 AM

To: 'limsattea@yahoo.co.in'

Cc: 'Arunachal Horticulture'; 'roinghortiofficer@gmail.com'; 'dholohit11@gmail.com'; 'safior.rahman@gmail.com'; 'balom-06@yahoo.com'; 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'; 'RAVIKIRAN MALIK'

Subject: NORTH EAST TRIP: Arunachal - Roing - Mr Somu Linggi

Dear Mr Somu Linggi,

Thanks for the valuable time you spared on Sunday when I called on you.

Good to hear you talk about the Tribal Development Fund activity, funded by Nabard, in helping orange and pineapple growers a couple of years ago.

Idu community's reluctance to be seen selling in marketplace needs a mindset change. It's a psychological issue that needs a quick redressal.

You said one of the NGOs operating in Arunachal is addressing.

Sir, hope to be in touch with you to keep abreast of happenings in Roing in the horti horizon.

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]

Sent: Monday, November 19, 2012 6:14 PM

To: 'Vinay Varma'

Cc: 'Pawanexh Kohli'

Subject: NORTH EAST TRIP: Belly cargo airlift of oranges/pineapples from Tezu/Wakro/Roing to Karimganj/Assam

Dear Vinay,

I waited for sometime to lapse before I could gather my thoughts and explore Jet doing something for the nation on the perishable cargo side from northeast.

Now that I travelled and met for three weeks various growers and understood their transport concerns, am in a better position to articulate.

The issue is simple:

Growers of orange, for instance, are facing a severe challenge in terms of transportation.

Their buyers are 99% from Karimganj, Assam where truckloads consolidated and pushed into Bangladesh for export mostly to the Persian Gulf.

Transporting from Wakro, Tezu and Roing of oranges is humungous by road due to variety of reasons.

But oranges destination is Karimganj.

Which is the nearest airport to service Karimganj?

Exports of orange is seasonable: November/December.

Hundreds of tonnes pushed from Wakro, Tezu and Roing to Karimganj. Am sure more oranges from Pasighat too to Karimganj.

How about some kind of freight forwarding of oranges/pineapples on a trial basis from government nurseries at a price?

Today, growers get Rs.1.60-2.00 per fruit because buyers claim transportation cost is very huge by road.

I want growers to get at least Rs.3 in Harvest 2013 (flowering happens in Feb soon after it begins to rain and fruiting happens Nov/Dec for harvest. Now is the harvest season

Couple of sorties from some helipad in Tezu perhaps (there is one for army purpose in Tezu) and closer to Roing and Wakro.

Since we will be focused on experimenting with govt nursery produce (last year Roing sold its oranges at Rs.1.60 per fruit as against buyers giving Rs.1 or less to sellers from non-government side, there will be no hungama.

If this works well, perhaps you can open a new huge biz in northeast for Jet cargo.

These are all preliminary thoughts.

Why don't you visit these districts I mentioned above and I can arrange meetings for you with District Horti Officers there.

This is the harvest season. Or send your scouts to look at the volume movement from these districts alone.

Litchi is evacuated around June/July

That way, every month there is some movement or other.

Give it a thought and revert.

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Monday, November 19, 2012 6:16 PM
To: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'; 'Arunachal Horticulture'
Subject: NORTHEAST TRIP: Higher altitude evacuation and ropeway

Dear Capt. Pawanexh Kohli,

Higher altitude districts bigger challenges of moving their perishable stuff to plains before sending them to Karimganj/Assam – the ultimate destination as of now.

How about using ropeway, if it exists.

If it does not, how about exploring introduction of ropeway for both cargo and people movement.

Just a thought.

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Monday, November 19, 2012 6:27 PM
To: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'; 'Arunachal Horticulture'
Subject: NORTHEAST TRIP: Transportation of perishable from Tezu/Roing/Wakro to Karimganj

Dear Capt. Pawanexh Kohli,

Today it is crystal clear that all northeast oranges are meant for the Gulf via Karimganj/Assam.

Buyers are not lying 100% about challenges on highways by antisocial elements, RTOs, Traffic inspectors, etc.

Growers beautifully put it when they said, "Assam is a millstone around Arunachal's neck".

Arunachal cannot move a single orange out of its boundaries without crossing Assam till a viable and alternative is found.

Rooting out anti-social elements and eliminating RTO goondagiri on highways is asking for moon.

What impact the roll out of GST will have on orange meant for Karimganj is too churlish to talk.

It is a well oiled mafia – linked or otherwise is working overtime to make a killing from hapless Arunachali growers.

So, it is not simply a marketing issue, but much a larger social issue as far as northeast is concerned.

The remedy lies in thinking out of box.

That's where am broaching the Brahmaputra route and horti train upto Tinsukia/Dibrugarh and Jet aircargo from even military bases at peace time to airlift oranges in Nov/Dec from Tezu to Agartala/Silchar where there are airports.

Just a thought.

Date: 20-11-2012

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Tuesday, November 20, 2012 11:33 AM
To: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'; 'Arunachal Horticulture'
Cc: 'balom_06@yahoo.com'; 'otergao@yahoo.com'; 'roinghortiofficer@gmail.com'; 'dholohit11@gmail.com'; 'safior.rahman@gmail.com'
Subject: NORTHEAST TRIP: Arunachal - Pasighat

Dear Capt. Pawanexh Kohli,

Greetings from Pasighat.

It was a great journey from Roing to Pasighat.

I would have taken the easy route of NH52 – built by Border Roads Organisation (some patches excellent, mostly pathetic).

This way, I would have travelled an additional 40 km, but in far more comfy zone.

But I chose a shorter, 110 km 'multimodal' route. Road (it is a misnomer because roads as it is understood in metro/urban or mainland India parlance does not exist in northeast. It is saddening) and several river-crossings through Assam.

Several wooden bridges built by locals and who eagle-eyedly watch passage of each vehicle and collect Rs.100 per vehicle/crossing while half built bridges by contractors remain just next.

It was adventure for me. Until a Assistant Sub Inspector (Telecom) travelling with me over River Tibang interjected when I exclaimed, "Wow!" at the beautiful boat tide.

"What 'wow!' It is a bloody pain travelling like this for years. No proper roads. For cityfolks like you once in a while, it is wild life safari. For people living in Arunachal, who have to travel almost daily like this, it is a punishment," he reprimanded me.

Expectantly, I felt silent, the rest of the journey.

Had a great opening session with Mr Balom Apum, DHO-Pasighat soon after touching down at Pasighat office in the company of HDO (hq) Mr Oter Gao and Mr K Kumar, who has been promoted and about to move out.

Again over dinner at the Guest House, Mr Apum opened up to give a glimpse of his grey cells on what is good and what is not on the post-harvest marketing initiative drive being contemplated.

Miss I Eling, HDO, also joined the dinner get together with Mr Kumar.

Mr Apum's prescription is clear.

Involve or engage middle men (the so-called buyers/agents on behalf of Karimganj/Silchar actual buyers) in Pasighat or anywhere in Arunachal for better success of any post harvest marketing initiative.

Government cannot match their services.

These buyers go to farmgate to pluck and transport. And quick disposal of payment. Advance too in many cases. Govt, it is doubtful, will be able to do that.

Administration, not marketing, is govt's forte.

He showed positive response on the idea of using Brahmaputra as an alternate mode of transporting perishables to Guwahati and forward.

"The British used to use Brahmaputra for trade purposes. And I remember seeing traders carrying pumpkins on Brahmaputra boats in my childhood. Why not, now?" he posed.

However, turning his attention on the non-functionality of the Brahmaputra board, he maintained that its original purpose was "flood control" and not trade promotion.

My view is: let not Brahmaputra board to anything else but flood control, but more vigorously which demands a lot more desilting, dredging which indirectly bring down the water level and thus avoid flooding plus better irrigation and higher production.

He was 'gungho' when he heard the 'horti train' idea going upto Tinsukia/Dibrugarh to collect oranges/pineapples and pushing them to Silchar (nearest railhead for Karimganj) and or exploring mainland India.

Another interesting point of view raised by Mr Apum was. Currently the government is on an area expansion programme and he does not see any problems for next 10 years or so.

Why? Because whatever is being produced in Arunachal is being gobbled up. After 10 years, unless there is a proper marketing structure, supply will exceed demand with the current focus of Bangladesh export route alone via Karimganj.

So, something viable and attractive to growers need to be worked out.

Nabard role in marketing failed because of too much of restraining clauses in its working arrangement via NGOs.

Today (Tuesday) and tomorrow, I am being shown around orchards (again oranges and pineapples etc. Not kiwi yet) and interaction with farmers interaction and Karimganj connectors!

On FDI, locals need far greater awareness and education on how it can help them, he said.

He advised and organized to send me to Along from Pasighat tomorrow evening - hardly 60 km away from Pasighat.

My Wednesday night and Thursday will be at Along.

From there, I plan to proceed to Ziro - midway between Along and Ita Nagar.

Mr Tani: Kindly alert Ziro DHO about my impending visit on Thursday evening/Friday. Also give contact details. I will also request Mr Apum to link me with Ziro meanwhile.

Most likely I will reach Itanagar Saturday/Sunday.

Hope to meet you in Itanagar Monday.

Sir, Meanwhile, my Inner Line Permit is for 15 days only w.e.f. 11th Nov and will be expiring by the time I meet you.

Kindly get it extended till 30th November.

For now, that's all.

Date: 21-11-2012

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]

Sent: Wednesday, November 21, 2012 6:27 AM

To: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)';

'Surender Kaul'; 'nhbghy@gmail.com'; 'Arunachal Horticulture'

Cc: 'balom_06@yahoo.com'; 'roinghortiofficer@gmail.com';

'dholohit11@gmail.com'; 'safior.rahman@gmail.com';

'otergao@yahoo.com'

Subject: NORTHEAST TRIP: Arunachal - Pasighat - Farmers interaction

Dear Capt. Pawanexh Kohli,

It was a total packaged day @ Pasighat, very well orchestrated by DHO Mr Balom Apum and ably implemented by HDO Mr Kishan Kumar (last few hours before he departs to take charge of new assignment as SDSO at Bolung which I had crossed on my way from Roing recently) and DHO (HQ) Mr Oter Gao - a 1997 batch from Jorhat-based Assam Agriculture University. Keep bumping into this 1997 batch chums everywhere, who incidentally are very 'passionate' about horticulture. Good for them. Good for Arunachal. And Good for India.

- a) Met Tajum Tasung, Boying village – considered as No.2 orange grower in this area.
- b) His uncle, Talem Tasung – who has his own orchard, smaller in size.
- c) Mr Oling Ering, 1000 trees orchard owner

Then we moved to:

- d) Otik Tai, kapek (banana in their language) and takobeling (pineapple) grower.

Next halt was a women's cooperative society that is into commercial floriculture. Growing enthuriam (see pix in attachment).

- e) Met Omi Dai, Otisitang Eko (wife of Conservator of Forests), Nekot Dai & Kenpu Tongu (see pix)

Then, met the most interesting personality so far – a man who joined govt service as Village Level Worker (today's equivalent is Agricultural/Horticultural Field Assistant) in 1964. 70 plus, active and reaps goodies from his 35 year old orchard of pineapple, balancia, etc. Another victim of greedy Delhi-Panjab traders on ginger in 1984. Will tell his story some other time.

- f) Jokud Modi
- g) Met Dr Ajai Kumar Pandey, Dean, Central Agricultural University & Forestry, Pasighat. He served in Mizoram in 1990s and spoke about pineapple glut of that time.

Post lunch, we drove to Tekong village for meeting a group of orange growers.

- h) Tanto Jerang (53 year) and his 70 plus father Pabu Tayeng, an ex-fauji who fought the 1962 War in the colours of Assam Rifles.

By the way, this ex-fauji says, "don't eliminate the Karimganj gang. They play a vital role which government is not able to do so far. Involve them in anything you do for marketing of our oranges!

Yesterday, DHO Mr Balom Apum said this. Today, this farmer. Interesting and significant.

- a) Late evening (6 p.m.), met Taloka Darang (you can check that encounter in a separate detailed dispatch).
- b) Also visited Commercial Floriculture polyhouse in the company of Dr Sunil Kumar of the University with HDO Mr Oter Gao just before lunch.

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Wednesday, November 21, 2012 6:27 AM
To: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'; 'Arunachal Horticulture'
Cc: 'balom_06@yahoo.com'; 'roinghortiofficer@gmail.com'; 'dholohit11@gmail.com'; 'safior.rahman@gmail.com'; 'otergao@yahoo.com'
Subject: NORTHEAST TRIP: Arunachal - Pasighat - Knock, knock!

Dear Capt. Pawanexh Kohli,

Kishor Kumar was singing exclusively for me through Ipod the unforgettable *Musafir ... yaaro ditty*.

I did not hear, therefore, the 'knock, knock' on my door at the Transit Hostel of Central Agriculture University, Pasighat, arranged by DHO-Pasighat Mr Belom Apum the day before when I had come from Roing, the neighbouring circle in Lohit district.

Then there was the irritating 'grrrrr' ear-splitting sound of the doorbell.

I unplugged the Rajesh Khanna-featuring soulful song and got out to check who the knocker on my door was.

He was there. The knocker. Mr Taloka Darang.

He introduced himself in English and reminded that Mr Oter Gao (HDO-Pasighat) ought to have spoken about him to me.

I nodded and invited him into the living room: another mosquito-netted bed, a working table with a chair.

We are supposed to meet today (Wednesday, 21 November 2012) at Pangin (some 60 km away from Pasighat towards Along) at his presumed to be ready **food processing unit set up at an estimated cost of Rs.1.3 crore**.

But, here he is. In front of me. In Pasighat. A day in advance.

"There is a death in a friend's family in Pasighat this morning and that's why I had come down and realized that I won't be available in Pangin when you come calling tomorrow. So decided to meet you here," he said with a lot of panache and concern at the same time.

His story is very interesting.

Four years ago, the **23 hectares/9,000 orange tree orchard owner** decided to set up a food processing unit with little idea except to 'explore new business avenues' at **Komsing village**.

His plan was to slice oranges from his orchards and 'can' them for markets. Also 'canned' juice.

Which market? I interject.

"Sorry. Never gave a thought about marketing....," he shyly responds.

Where did the money come from?

SBI Pangin gave him Rs.15 lakhs as term loan, SFAC some 4.5 lakhs and the rest came from his own kitty and friends.

"I promised them (friends) to return a.s.a.p.," says he.

The hurt in his eyes unavoidable. He feels to let down his friends. Unable to fulfil his promise. Till today.

Why?

The plant is yet to be commissioned. Ufff!

What?

"Yes, the plant is not ready," he confirms.

Why such a long delay? Anything wrong with the equipment supplier? Any financial problems that he could not muster?

No, no.

First, there was some challenge on the water front. Then lack of power supply. And a host of related issues.

He hastens to add: "Now the building is ready. Machines are ready for installation. Water and power issues solved."

Good thing is that he is ready to roll out in a few weeks time.

January 2013? Maybe much before, he assures me.

Then.... He ought to be glad that his dream project will take off.

The fiftyish Darang is not.

"What is your problem?"

"Whom to sell? I don't know," he blurts out.

What? Whom to sell is not deciphered? No business plan in place?

Did he get any consultancy to guide him?

He does not respond clearly.

I don't want to make him feel sadder.

How can he afford to plan a business enterprise without any 'marketing', I ask him nevertheless.

He smiles.

What does he want from me?

"I heard you've come from Delhi to help growers like us to sell/market our oranges, pineapple, ginger ..," says he without batting an eyelid.

"That's why I did not want to miss meeting you!" That's Darang, yes.

According to him, Horti department of Arunachal Pradesh has extended technical help over years through DHO-Pasighat.

But, they have no marketing expertise.

"How can they offer something that they don't have?" asks the rich man from Pangin circle.

Rich?

Consider this.

His orchard consists of 9,000 trees. Say, 3,000 trees are of 20 years vintage. Another 2,000 are of 17 years. Maybe the rest are 7-8 years old.

Orange begins to give fruits 7 years after it has planted and nurtured. As years grow, the yield per tree keeps increasing.

Given the agroclimatic condition of Arunachal, growers like Darang does not have to do much on a daily basis. It just grows and grows and keeps minting money – loads and loads of it.

I recollect what HDO-Tezu Safior Rahman told me 10 days ago on a visit to one of the orange orchard.

"Plant oranges. They are like insurance and life-time providers. Better option than sons," is how he put it.

Did not Graftor Dhanpal Singh @ Roing echo the same sentiments later that those who pay a 'little' attention have nothing to worry for generations?

I look at Darang sitting in front of me.

His farm has a sizeable chunk of 'money-spinner. So his yield per tree ought to humungous, notwithstanding the Karimganj/Silchar gang of robber-buyers of his produce!

How come he never gave a thought on marketing so far?

'I know the government will rescue me,' says Darang.

Suddenly, his phone begins to ring.

He has to leave.

We shook hands.

I see him off into his waiting vehicle outside the Transit Hostel.

"Am confident you will help me sell," is his parting words.

Shell-shocked is too mild a word to describe my mood at this juncture.

Before sunset today (by the way, sun bids good bye around 4 p.m. in Arunachal!), I would have seen his food processing unit in Pangin, Godwilling.

And would have departed for Along, my nest for tonight after that.

Date: 24-11-2012

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]

Sent: Saturday, November 24, 2012 4:28 PM

To: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'Arunachal Horticulture'

Cc: 'dholohit11@gmail.com'; 'roinghortiofficer@gmail.com'; 'balom_06@yahoo.com'; 'karyomdoji@yahoo.com'; 'safior.rahman@gmail.com'; 'otergao@yahoo.com'; 'bamikoyu2012@gmail.com'; 'henrikbasar@rediffmail.com'

Subject: NORTHEAST TRIP: Arunachal - Aalo - Jai Jawan, Jai Kisan!

Dear Capt. Pawanexh Kohli,

Remember late Prime Minister Lal Bahadur Shastri's famous 'Jai Jawan, Jai Kisan' war cry at the height of 1965 Indo Pak crisis?

This JJK slogan flashed back during a conversation with Bagra farmers today in the company of DHO-Aalo Mr Karyom Doji.

Bagra farmers have time and again supply to army contractors at Rs.2/pineapple.

If farmers have a cooperative society, they may be considered to offer directly to army tenders instead of routing through middle men.

Such tenders, they said, emanate from Dibrugarh or Tezpur.

Maybe DHOs need to be alert to such tenders and help growers in this process.

Once the HMOs are in place, they can monitor and help growers.

Growers are as vital as Soldiers.

Why use a middle men and why not Growers-Soldiers bond directly provided growers approach army through cooperative societies?

Just a thought...

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Saturday, November 24, 2012 4:28 PM
To: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'Arunachal Horticulture'
Cc: 'dholohit11@gmail.com'; 'roinghortiofficer@gmail.com'; 'balom_06@yahoo.com'; 'karyomdoji@yahoo.com'; 'safior.rahman@gmail.com'; 'otergao@yahoo.com'; 'bamikoyu2012@gmail.com'; 'henrikbasar@rediffmail.com'
Subject: NORTHEAST TRIP: Arunachal - Aalo - Farmers Management Group

Dear Capt. Pawanexh Kohli,

It was heartening to note that Mr Karyom Doji, DHO-Aalo fully endorsed the concept of Assam-type Farmers Management Group (FMG) cropwise in his district as and when the HMO comes into fruition.

During an interaction with a set of farmers in Bagra village on Friday (23 Nov), farmers kept asking what to do and that's when I explained the FMG example.

Bagra is a pineapple belt and growers have group meetings.

Each one of them deals with buyers individually.

The Wakro experiment of 4 member price fixation of orange (as explained to me by Mr Ramashankar Singh, HDO-Wakro) also made farmers to believe collective action is to be 'considered favourably'.

Mr Doji also explained that the legal framework for Marketing Board in Arunachal is ready, but yet to be peopled.

"My first assignment to HMO in our district is to ask him to interact with farmers to create such groups. It's in their own interest," he said.

Maybe quarterly meeting of DHOs at different districts for exchange of ideas can be considered.

Wakro experiment is unknown even to Tezu – hardly less than 100 km away!

This is where, in one of the previous mails, I suggested some kind of documentation by every single DHO on steps taken and HDO's daily field visit reports.

I have no idea of DHO reports to Itanagar.

But no HDO maintains a daily visit report of HFAs, Grafters etc.

Which will be a good beginning of best practices.

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Saturday, November 24, 2012 4:28 PM
To: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'Arunachal Horticulture'
Cc: 'dholohit11@gmail.com'; 'roinghortiofficer@gmail.com'; 'balom_06@yahoo.com'; 'karyomdoji@yahoo.com'; 'safior.rahman@gmail.com'; 'otergao@yahoo.com'; 'henrikbasar@rediffmail.com'
Subject: NORTHEAST TRIP: Arunachal - Aalo - Litmus Test on turmeric front

Dear Capt. Pawanexh Kohli,

Mr Doi Ado, former minister of education, during today's meeting (23 Nov 2012) at his residence, warned turmeric glut in the state during the feb/march harvest season, particularly in the district of Aalo.

He said twin challenges face farmers on turmeric front:

- a) Huge supply that needs to be evacuated. So transport challenge
- b) Excess supply may also crash prices.

He is the Chairman of Siang Farmers' Federation started a year ago and consisting of 600 farmers.

"I have told you about the impending crisis almost 100 days in advance. Ensure steps are taken to handle this," he told.

Crash of ginger price to Rs.2/kg has compelled farmers 'not to harvest' at all and permit them to die and give birth to next season's harvest.

Am sure Itanagar will be able to handle this issue in view of advance projections on production front.

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Saturday, November 24, 2012 4:28 PM
To: 'bamikoyu2012@gmail.com'
Cc: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'Arunachal Horticulture'; 'balom_06@yahoo.com'; 'otergao@yahoo.com'; 'roinghortiofficer@gmail.com'; 'dholohit11@gmail.com'; 'safior.rahman@gmail.com'; 'karyomdoji@yahoo.com'; 'henrikbasar@rediffmail.com'
Subject: NORTHEAST TRIP: Arunachal - Mr Tapang Taloh, Minister of Industry, Govt of Arunachal Pradesh

Dear Mr Bami,

During my interaction with the Hon'ble Minister Mr Tapang Taloh, Minister of Industry, Govt of Arunachal Pradesh, in his Pangin home, he requested for the complete office address from where the National Committee on Supply Chain and Logistics (NCSL) functions from New Delhi.

Here it is:

Room No. 645
A Wing, Gate No. 5
Nirman Bhavan
New Delhi.

Capt. Pawanexh Kohli, Chief Advisor, Ministry of Agriculture, operates from this office to whom I report to.

Hon'ble Minister said that he would be in New Delhi next week and wish to meet/visit our office, if time permits.

Kindly forward this Delhi office to his office staff in Itanagar.

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Saturday, November 24, 2012 4:28 PM
To: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'Arunachal Horticulture'
Cc: 'dholohit11@gmail.com'; 'roinghortiofficer@gmail.com'; 'karyomdoji@yahoo.com'; 'safior.rahman@gmail.com'; 'bamikoyu2012@gmail.com'; 'balom_06@yahoo.com'; 'otergao@yahoo.com'
Subject: NORTHEAST TRIP: Arunachal - Aalo (Along) - Prominent NGO

Dear Capt. Pawanexh Kohli

Post meeting Arunachal Pradesh Minister for Industries Mr Tapong Taloh in Pangin, we drove down the banks of Siyom (40 km) on a better road to Aalo (earlier known as Along).

Met Mr Karyom Doji, DHO-Aalo at his office.

In company with Mr T S C Singh (Manipuri-speaking, Tripuran, settled in Arunachal for over 25 years) and Mrs. Dugnuyu Ete (HDO), crossed Siyom river for an interaction with a young farmer, who successfully runs a collective farming with several hundred small and marginal farmers in this belt – emerging as turmeric belt.

Tareng Taga is a role model to be emulated. Why?

He is just not a 'progressive farmer', but a 'prominent farmer', as Mr Singh puts it.

He markets his product on the quality plank. Got 'organic' certification. Helps farmers to get SBI KCC loan at 4% and stands as guarantor for each loan. Today he is a guarantor for more than Rs, 1 crore.

What's his risk mitigation strategy given this kind of exposure?

He got into contract farming/buy back arrangement with each of these farmers.

He buys their produce when ready.

Cleans the produce (ginger, cardamom, turmeric, orange) and weeds out duplicate items, removes mud, stones and sends quality stuff.

Buyers from siliguri, Guwahati who bought once have become regulars with increased order size year after year.

His transportation is managed by Deepak Agarwal sitting in Guwahati. All his sold items are sent to Deepak's place from where items are well transshipped to Karimganj, Siliguri or wherever.

He has no hassle with the Karimganj gang.

They are also present in Aalo, West Kameng District.

Significantly, he has come under the scanner of Tatas and he is helping them gather market intelligence about farmers, hectares of each produce etc at a dirty cheap price of Rs.7000.

One of his farm supervisor is put on Tata contract for three months for this exercise.

It is learnt that Tatas wanted to enter into a MOU with him, but he is not ready as yet.

Regular intervals farmers are sent to various fora to gain knowledge of better farming and better farming even at Kerala.

An interesting character and needs lot more exposure within the state.

His NGO Green Gold Agro Environmental Alliance, which started as SHG, is a name to reckon with and HDO staff go 'gaga' over his achievements.

Truly loads of entrepreneur spirits.

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Saturday, November 24, 2012 4:28 PM
To: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'; 'Arunachal Horticulture'
Cc: 'dholohit11@gmail.com'; 'balom_06@yahoo.com'; 'roinghortiofficer@gmail.com'; 'otergao@yahoo.com'; 'bamikoyu2012@gmail.com'; 'safior.rahman@gmail.com'; 'karyomdoji@yahoo.com'
Subject: NORTHEAST TRIP: Pangin - Minister for Industry, Mr Tapong Taloh

Dear Capt. Pawanexh Kohli,

At the Inspection Bungalow in Pangin where I was lodged for over night stay before proceeding to Aalo (not Aalong any more), suddenly an excitement among staff and find a young man walking in.

Everybody 'namaste's him. I too.

He turns out to be the Hon'ble Minister for Industries Mr Tapong Taloh.

After introduction of myself by HDO-Pangin Bami Koyu, the purpose of my visit to Arunachal districts is explained to him.

He is impressed and says that Arunachali kisans should get a better deal for their fruits with 'central assistance in marketing'.

I bring up the topic of Mr Darang in Pangin waiting for four years to get his food processing unit going due to lack of water and power linkage.

He says it has been sorted out.

Then he talks on how Arunachal can emerge as a power house if its hydro capability is tapped and the anti dam movement is a hurdle, says he.

Pangin is part of his constituency and his hometown.

He is stranded because of lack of phone connectivity (gone out of order for more than a week) and his staff cannot reach HQ for his helicopter!

Am invited for a meeting at his home next morning.

Soon after breakfast at a progressive farmer's home nearby, we drove to the Minister's house where a large contingent of locals have turned up to meet him.

All of us seated, tea offered and he pulls his chair closer to me and we talk on more horti scenario and what ought to be done.

Then his wife offers the traditional Arunachali jacket and am asked to give a speech to the gathering the purpose of my visit.

Now, I have perfected my 'speech' and it flows like Mighty Siang effortless and with vigour.

He wants to meet the NCCD-NCSL team in our office during his next visit to Delhi.

Takes my phone number etc.

He tells that I should meet the Hon'ble Chief Minister when I visit Itanagar and promises to arrange the meeting.

The discussion also dwelt on:

- Though huge limestone deposit is there in Arunachal, poor road connectivity for marketing is a stumbling block
- There is just one industry cluster in the state instead of more.
- The release of grant for NH229 (the Trans Arunachal Highway) should be speeded up. Now it has got PM Package 2.

Date: 25-11-2012

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]

Sent: Sunday, November 25, 2012 7:01 AM

To: 'iwainoi@nic.in'; 'chairman.iwai@nic.in'

Cc: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'; 'Arunachal Horticulture'; 'degoronya01@gmail.com'; 'dholohit11@gmail.com'; 'roinghortiofficer@gmail.com'; 'balom_06@yahoo.com'; 'karyomdoji@yahoo.com'; 'safior.rahman@gmail.com'; 'otergao@yahoo.com'; 'henrikbasar@rediffmail.com'; 'sohliya@gmail.com'; 'vc.iwai@nic.in'; 'mtr.iwai@nic.in'; 'aroy.iwai@nic.in'; 'nckonar.iwai@nic.in'

Subject: Inland Waterways Authority of India & Brahmaputra/Siang river - Navigation option for trade and commerce in Northeast India

Attn: Mr. Vishwapati Trivedi, Chairman, Inland Waterways Authority of India, Noida, Uttar Pradesh

Sir,

Greetings.

As a Member of the recently constituted **National Committee on Supply Chain & Logistics under the Ministry of Agriculture**, currently I am travelling in north east to study how to improve post-harvest marketing initiative for horti-produce growers for the past 30 days.

I completed Assam partially and currently in Arunachal Pradesh travelling through the horti/agri-rich areas of the largest state in the north east.

Arunachal horti-growers (orange, pineapple, kiwi, balancia/mosambi, large cardamom, ginger, turmeric, etc) are faced with a severe infrastructure crunch.

Simply put, they have no roads or highways as we understand in the common parlance. The completion of Trans Arunachal Highway linking all state district headquarters is at least five-six years away.

The harassment they face on road particularly in Assam since they have to cross its southern neighbor for link with mainland to push their produce is horrible.

Hon'ble Prime Minister Dr Manmohan Singh has frequently urged better utilization of our waterways.

Recently in Guwahati I happen cross the Port managed by your organization on the banks of Mighty Brahmaputra at the foothills of Kamakhya mandir.

I seek your indulgence to know whether IWAI has examined the feasibility of using Mighty Brahmaputra for pushing farm fresh Arunachali horti products.

Considering the fact that Mighty Siang (as it is known in Arunachal) is nothing but Mighty Brahmaputra and it can alleviate the transport bottleneck of Arunachal, IWAI's role would be vital.

Sir, am Delhi-based and should be back soon.

I seek an appointment with you and your senior team – who has some exposure to this region.

Look forward to hearing from you,

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]

Sent: Sunday, November 25, 2012 6:51 AM

To: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)';

'Surender Kaul'; 'Arunachal Horticulture'; 'nhbghy@gmail.com'

Cc: 'degoronya01@gmail.com'; 'dholohit11@gmail.com';

'roinghortiofficer@gmail.com'; 'balom_06@yahoo.com';

'karyomdoji@yahoo.com'; 'safior.rahman@gmail.com';

'otergao@yahoo.com'; 'henrikbasar@rediffmail.com'

Subject: NORTHEAST TRIP: Arunachal - Itanagar - Who's Dr Abir Birbaw?

Dear Capt. Pawanexh Kohli,

I heard this name twice over the past week in Arunachal.

He is Delhi based and considered to be a facilitator for organic farming certification.

It is heartening to note that Arunachali horti-growers are seeking assistance to get their produce 'organic' certified.

Dr Birbaw seems to have promised some of growers that he can get 'foreign connect' for their organic produce.

Significantly, organic farming in Arunachal is by default which I had spoken about in my previous mails under "bullshit farming".

There is a worldwide craze for organic items and Arunachal should ride on this unique selling proposition.

I plan to catch up with Dr Birbaw once back in Delhi.

Date: 28-11-2012

From: Ramesh Kumar [<mailto:supplychainindia@gmail.com>]

Sent: Wednesday, November 28, 2012 4:20 AM

To: 'hage_kojeen@rediffmail.com'

Cc: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'; 'Arunachal Horticulture'; 'akp2005_aru@yahoo.com'; 'md neramac'; 'degoronya01@gmail.com'; 'dholohit11@gmail.com'; 'roinghortiofficer@gmail.com'; 'balom_06@yahoo.com'; 'karyomdoji@yahoo.com'; 'safior.rahman@gmail.com'; 'otergao@yahoo.com'; 'bamikoyu2012@gmail.com'; 'henrikbasar@rediffmail.com'

Subject: NORTHEAST TRIP: Arunachal - Itanagar - Meeting with Commissioner Mr Hage Kojeen and others

Attn: Mr Hage Kojeen, Commissioner, Government of Arunachal Pradesh

Dear Mr Kojeen,

Thanks for the valuable time you had spared yesterday when we met in your office with a host of officials associated with agri and horticulture department on the ground reality of fruit growers and the absence of post harvest marketing support in the state of Arunachal Pradesh.

Yourself having served in various capacities in the state over the years, you were aware of transport bottlenecks, lack of anything that can be called 'roads' in Arunachal. No roads, no development. You hinted at the slow progress of special PM package release for the Trans Arunachal Highway project currently underway. Well, it appears the completion is far away, need to be speeded up.

Again, I was happy to hear you say that the state government is keen to revive the Nigmoi-based food processing plant – the first of its kind in the state – that remains shut down for a variety of reasons – including inefficient management, growers' apathy to sell their produce at wholesale price and instead their demand for market-related price. Sir, this need to be speeded up. Having visited the site wherein huge dollops of public money has been spent, it is of paramount importance to speed up this revival process at the earliest through the joint venture route with any prospective private sector participant.

Nonetheless, the need to educate growers on the need for change of their mindset. No company in the world can survive – be it a PSU or private sector – if it is forced to procure raw materials at Market-related price. And the growers need to be appraised that it is in their own interest to enter into long term MoUs with the prospective operators of this sick PSU at Nigmoi at wholesale price. Growers cannot survive if they try to sell their produce on a daily basis in the local or distant market. Both are not viable on a long term basis.

It was interesting in this context to hear out Mr Puryakastya of Agriculture Marketing Board – who is on the verge of retirement, I reckon – speaking eloquently on the need for food processing units to plan multipurpose items to be done at their sites to ensure this does not become a seasonal business. That way, owners of processing plants in Arunachal will go kaput.

Considering the fact that a brand new food processing unit owned by Mr Durang is ready for inauguration soon at Pangin (the Industry Minister's hometown and electoral constituency), efforts need to be done to ensure this unit does not fail. If it does, it will send wrong signal. Luckily, Mr Durang owns a 14,000 tree orange orchard and hence he may not face the hortiproduce seller's reluctance to sell at wholesale price.

Value added services in the form of cleaning, packaging in saleable lots to assist ultimate buyers, building up of collection centres in select locations in the state and the use of bin for longer lifespan of horti produce articulated by the AMB Director (Marketing) was significant.

It is not difficult to fathom that Assam is the 'lifeline' for Arunachal in the sense that the southern neighbor provides the quintessential road link support to move from one district to another even within Arunachal. This is for the simple reason, in the absence of any pucca roads, you cannot simply move within your state without first crossing over to Assam and then re-enter Arunachal at a different point.

The harassment of Arunachal trucks that ferry horti produce once it enters Assam by various government officials to extort an 'unofficial rent' is unpardonable. We all know that there is something called "National Permit System" wherein fleet owners cough up Rs.15,000 per annum to ply wherever they wish within Union of India hassle-free. Well, it appears, NPS exists simply on paper. Needs a lot of retrospection at the centre government level.

There was a lot of consensus among your officers (Director-Horticulture Mr Jambo Rattan was also present) that kiwi growers should reconsider their decision to reject the Tata company proposal to buy kiwis to market them across India under the brand name "Indiakivi". Though your growers provided last year kiwi at Rs.70/kg in the size between 60-100 gms, this year, they refused on the plea that Tata should buy out the entire lot and not be selective. Tatas, it is learnt, demanded that they will buy kiwi in the size below 60 gm and above 100 gm for whatever reason. Growers became restive because they have no clue as to what to do with the left out sizes if the Tata deals goes through.

Usually, such below 60 and above 100 gm kiwi fruits would have been consumed by food processing units, had they existed. Unfortunately, they do not now in Arunachal.

Mr Puryakastya conceded that had they agreed to the Tata proposal, they would have disposed off a sizeable chunk of their produce by now.

It is significant to hear the Marketing Board official, coming straight out of Parliamentary Secretary (Agriculture) office for this meeting and admitting that a 500-600 quintals of kiwi is lying near Ziro for want of buyer and he is trying his best to find buyers anywhere in India.

Collection centres at select points, enabling and coaxing farmers to come together under some kind of farmers' management group, indulging in a bit of value added

services like packaging, use of bins, reefer trucks from collections centres to regional marketing hubs were discussed.

Sir, you stressed that Arunachal is unable to get financial packages under various centrally-sponsored schemes solely on the plea that it does not meet some of the eligibility criteria and you stressed that for a young state like Arunachal some of these norms need to be exempted if it all the state has to prosper.

On the role of Neramac in the region, the unanimous opinion was that it is a 'sick PSU' and lacks direction and vision to help North eastern agri and horti producers for which it was originally set up.

As far as APEDA is concerned, it can do a lot for the region with a cold storage hub at/near Guwahati airport. But its farmers or state officials connect is totally missing is what I heard.

Marketing Board Mr Puryakastya held forth eloquently on the need for a collective action by all states with Assam as the 'enabler'.

Without Assam's positive role, the region will continue to suffer.

He hinted at the lack of coordination among NE states in agri/horti produce issues.

Does not the Shillong-headquartered North Eastern Council, backed by the Department of North East Region (DONER) at the central level, serving this purpose?

Again, it became evident that NEC's role need to be reevaluated and spruced up.

Sir, Arunachali growers are yet to metamorphasise into businessman-farmers, unlike their counterparts like apple growers in Himachal, grape growers in Nashik, 'Orange's in Nagpur, sugarcane's in Maharashtra.

Maybe there is a crying need for inviting some of these farmers from there to visit Arunachal and interact/share their experience with Arunachal growers.

Workshops/seminars by Marketing Board are all fine for bringing farmers, potential buyers, scientists etc.

But what is of paramount importance of that growers categorically told me all these get together are 'buckwas'. Nothing comes out of these wasteful expenditure.

My exposure to your growers over the past few weeks conveys the impression that they want 'farmers connect' at their farm gates. Not in some mela ground or airconditioned conference rooms.

Arunachal growers are not business focused because everyone is interested in chasing govt contracts for building culverts or doing other businesses not related to their produce – be it orange, kiwi or large cardamom, pine apple.

It is also clear that everything is on auto pilot. Growers get free land from government. Horticulture department provides free seedlings under some scheme or other. Soil is fertile. It grows on its own after a gestation period of 5-7 years depending on the crop. Maintenance of orchards

is nothing to write home about. Selling their produce at any price to Karimganj/Silchar agents of Bangladesh exporters does not bother Arunachal growers much because they fully know they do very little.

Mindset change of growers to take horti production seriously is vital.

Nonetheless, the move to set up a Marketing Board as a separate entity away from Agri Marketing Board is a good move. While the HMB exists on paper, it is yet to take off.

Let it be filled up with professionals with right skill sets and should not become another APMC.

Sir, no one denies the fact that Arunachal's horticulture/agriculture richness is unparalleled. But potential alone is not sufficient to move up the growth path. Lot of other inputs is required. Predominant among them is a mindset change among growers. What price is right price is debatable, no doubt. But growers who have no accounting of their cost cannot insist on a particular price. The case in point is large cardamom, another Arunachali specialty. Some farmers sell at Rs.300/kg. Some at Rs.700/kg. What is the rationale? No farmer is able to offer any acceptance explanation. Just a demand and supply interplay?

Before concluding, I wish to thank your goodself once again for the valuable time and open and frank discussion you allowed yesterday. And also a special thanks for the excellent hospitality extended to me everywhere I had visited. A special thanks to Mr Narang Tani, Dy Director (Marketing) in the department of Horticulture.

I wish all the best for the state of Arunachal Pradesh.

The National Committee on Supply Chain & Logistics, of which I am one of the members, is always available for any consultation to promote best and viable practices in Arunachal in particular and north east region generally.

Look forward to meeting you again,

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]
Sent: Wednesday, November 28, 2012 4:42 AM
To: 'akp2005_aru@yahoo.com'
Cc: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'; 'Arunachal Horticulture'; 'akp2005_aru@yahoo.com'; 'md neramac'; 'degoronya01@gmail.com'; 'dholohit11@gmail.com'; 'roinghortiofficer@gmail.com'; 'balom_06@yahoo.com'; 'karyomdoji@yahoo.com'; 'safior.rahman@gmail.com'; 'otergao@yahoo.com'; 'bamikoyu2012@gmail.com'; 'henrikbasar@rediffmail.com'; 'hage_kojeen@rediffmail.com'
Subject: NORTHEAST TRIP: Arunachal - Itanagar - Brand building etc.

Dear Mr Purykastya,

It was nice hearing you harp on brand building in the context of Arunachal grower's lack of marketing prowess to push their horti produce.

It was significant to hear you say that growers should not get disheartened when they hear that the produce they had sold to buyers say, Rs.70/kg for kiwi is being sold at Rs.200 plus in distant markets.

The admission that the kiwi sold at the farmgates undergoes various stages of being hauled from farmgates to primary processing centre, then to second processing, branding, and wide network reach etc involve a lot of man and financial input. So naturally, the end user/consumer has to bear the full cost plus trader's margin

Arunachali grower is no exception to believe that he is taken for a ride by the buyer at his gate.

You rightly said that Arunachali growers should get into primary processing activity: namely packaging in small saleable lots at collection centres and fill them in bins before carted to next level – maybe the regional trading hub at Tezpur/Guwahati or Karimganj.

The current practice of orange growers not even being physically present in their farms at the time of harvest and giving a free hand to buyers to bring in their own labour for harvesting is shocking.

Even when they sell on per fruit basis, no counter checking of fruits happen. "Who has the time?" is the attitude of growers. This also displays a lack of serious business bent of mind.

Again, the kiwi growers' intransigence that 'take it full or leave it' in the case of Tata issue needs a relook.

Even now, nothing is lost. Kiwi growers should pursue and pick up threads and renew their Tata alliance.

Maybe next 3-4 years of regular business with this group may help them learn a few tricks.

At the same time, a huge responsibility lies with state administration to educate growers on the business angularities of doing business.

Growing is just the first part and of course, a vital stage. But that alone is not sufficient. Others are also involved to ensure Arunachali horti produce reaches the tables of people at home and across the globe.

Yes, as you said, the need of the hour is 'total solution' – not piecemeal.

Thanks for such an interesting interactive session at Commissioner's office yesterday.

Date: 02-12-2012

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]

Sent: Sunday, December 02, 2012 7:31 AM

To: 'Arunachal Horticulture'

Cc: 'hage_kojee@rediffmail.com'; 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)'; 'Surender Kaul'; 'nhbghy@gmail.com'; 'dholohit11@gmail.com'; 'roinghortiofficer@gmail.com'; 'balom_06@yahoo.com'; 'karyomdoji@yahoo.com'; 'bamikoyu2012@gmail.com'; 'safior.rahman@gmail.com'; 'otergao@yahoo.com'; 'henrikbasar@rediffmail.com'; 'degoronya01@gmail.com'; 'hibudante30@gmail.com'; 'tewari1@ymail.com'; 'md neramac'

Subject: NORTHEAST TRIP: Arunachal - Kiwi Awareness Campaign

Dear Mr Narang Tani,

Grower after grower kept harping that consumption of kiwi needs a big boost to help market it widely across India.

Even Assamese – the closest neighbor – have no idea about kiwi.

At Ziro, Kiwi Growers Club Secretary Kalung Bida spoke of its medicinal properties. How it can cure diabetes because of its natural insulin property. That's an interesting health angle to cash in on.

Most urbanites are 'experiencing' type 2 diabetes arising out of lack of physical activity in their daily life.

They drive down (never walk), use elevators (no stair climbing), work in airconditioned environment (not much physical strain, but mental stress yes) and eat a lot of junk (McD, KFC, oil dripping fried purie, samosa etc)

Excellent catchment area for diabetes.

So it is a perfect catchment area for kiwi as well.

Perhaps get this claim of diabetes-abating quality of kiwi by medical fraternity and then go whole hog.

Diabetic clinics are sprouting like mushroom across length and breadth of India.

Maybe there are some diabetic cases in Arunachal itself.

If district hospitals can treat them by giving kiwi treatment (actually, it is no treatment, but giving kiwi as part of regular food and observe their sugar levels for a specific period), that itself will give an excellent empirical study material to check out the veracity of kiwi as diabetic fighter.

Before I forget, India is recognized as the new emerging world capital of diabetes!

What a huge biz prospect! Wow!

Secondly, you should examine giving a dose of large cardamom to chefs of reputed hotels across india as a promotional effort.

They can try out some recipe or other and if they are convinced, they can influence their respective buyer to look for your produce.

How about approaching the Indian Railways to serve kiwi on Rajdhani/Satabdi Expresses that serve onboard lunch/dinner?

That again is a huge market.

Perhaps you should examine giving sample pouches of sliced kiwi in hygienic condition to passengers travelling in northeast (umpteens no. of airports) touching. Good promotional effort.

Begin with Air India/Indian Airlines.

Huge market again.

By the way, many mistake kiwi for **potato with two day stubble** item! So peel & serve will give a new perspective.

Green monster with million black tooth It may become!

Yes, rope in an advertising agency of repute to drum up support through an orchestrated kiwi awareness campaign – nationwide.

It does cost money. But nothing is free in this world.

Give it a thought.

Use your government's tourism offices in metros to put a desk for horti marketing officer who understands local lingo.

Make him/her visit supermarkets/food courts to gain an insight of food/fruit shopping by urbanites.

Date: 03-12-2012

From: Ramesh Kumar [<mailto:supplychainindia@gmail.com>]

Sent: Monday, December 03, 2012 7:09 AM

To: 'Pawanexh Kohli'; 'Shailendra Kumar (Director NCCD)';

'Surender Kaul'; 'nhbghy@gmail.com'; 'Arunachal Horticulture'

Cc: 'dholohit11@gmail.com'; 'roinghortiofficer@gmail.com';

'balom_06@yahoo.com'; 'karyomdoji@yahoo.com';

'degoronya01@gmail.com'; 'bamikoyu2012@gmail.com';

'safior.rahman@gmail.com'; 'otergao@yahoo.com';

'akp2005_aru@yahoo.com'; 'tewari1@gmail.com';

'hibudante30@gmail.com'; 'hage_kojeen@rediffmail.com'

Subject: NORTHEAST TRIP: Arunachal - Meeting with NERAMAC Managing Director S Bhattacharjee

Dear Mr Bhattacharjee,

It was nice of you to visit me with General Manager-Marketing Mr Kurup in Guwahati yesterday (Sunday), hours before I flew out to Delhi after the grueling 35 day, 3000 km road-cum-river journey through Assam and Arunachal Pradesh to study the post-harvest marketing initiative in the region.

Like a true sportsman, you defended Neramac on the slew of charges I had heard in Arunachal Pradesh from farmers. Mainly, they felt that Neramac offers 'no help' to them. If it does at times, its behaviour is worse than the middle men from Karimganj/Silchar.

Again, it was pointed out that you – an ex-Arunachal Pradesh civil service officer – had lost interest; plus, having delegated powers to your branch managers in each state capital, you have stopped monitoring and therefore, it is generally felt that Neramac is a sick PSU.

Against this backdrop which you were privy to through my mails to senior officers in Ministry of Agriculture in Delhi and officers in Itanagar, Arunachal Pradesh, we met.

You had taken me through the origin of Neramac – once upon a time was in the sick bay of BIFR – and how you came in and dwelt on how you managed to post net profit of Rs.one crore for the past three or four years consistently.

You had spoken of financial constraints and inadequate human resources and other challenging ground realities not only in Arunachal but across the entire region.

Since you are a corporation under the Ministry of Food Processing, and not with the Ministry of Agriculture, I will not be able to dwell on your financial challenges.

However, most farmers and officers in Arunachal Pradesh govt have expressed the same view which you had also sounded that Neramac ought to have been with the Ministry of Agriculture where there is a lot of synergy.

It was nice to know that you were part of the team that had something to do with the food processing unit in Nigmoi, near Aalo – now shut down due to managerial inefficiency.

You did elaborate how Neramac used to market that unit's produce in Guwahati etc.

Your request to your board for a fresh infusion of funds for better work in the region is well understood.

Referring to your future plan of action for Arunachal in particular, you said Neramac is ready for collection centres at select locations there, but maintained that it will be the responsibility of state government/marketing board to manage and Neramac will certainly help them market the produce.

You also referred that a Parliamentary Committee in its report had recommended greater infusion of funds and larger role for Neramac in the region, but nothing seems to be moving.

Neramac's recommendation for cold supply chain in 2008 thought got Planning Commission approval, is somehow lost steam in Delhi.

Maybe, improving connectivity is priority number no.1 as far as arunachal is concerned, I reckon.

Cold supply chain presupposes 'faster evacuation' from procurement centres.

Unless roads exist, nothing can move.

Till road infrastructure gets ready, you said airlifting will be the best option.

However you mentioned that Jet airways spoiled the whole game by quoting a stiffer price tag of Rs.20/kg.

If cargo handling charges is more than the cost of produce, then it would be difficult to do business, you said.

In fact, I had spoken to Mr Vinay Sharma of Jet Cargo over phone soon after our meeting yesterday.

I had conveyed your displeasure over pricing of cargo to him.

Soon I will write to him with a request to revert with a clear concrete plan of action on the part of Jet for this evacuation of perishables into mainland.

You remarked that Neramac is ready to play a big role in the region by helping growers to expand market, provided Neramac is made the nodal agency with greater power – men and money and operational freedom.

Referring to the farmers' diatribe that Neramac is visible only at workshops/seminars and not doing much through farmers connect at the farmgate level, you maintained that participation in such workshops/seminars is mandated by the board and even there you find it difficult to participate in all.

You indicated that in the recent past, you had tie ups with Reliance etc to buy kiwi, pineapple etc from Arunachal, but they backed out citing 'non-reliability' of supply due to infrastructural challenges.

During the discussion, it was agreed that Mr Kurup would arrange to send the correspondence with Jet and Reliance etc to pursue matters from the National Committee on Supply Chain & Logistics side.

Kindly do the needful.

I fully appreciate your concerns and desire to ramp up or rejuvenate Neramac to help growers in the region to reach out to bigger markets.

I shall be returning to the region soon and hope to catch up with you again.

Dear Vinay Verma,

This has reference to our teleconversation yesterday when I spoke about Neramac's disappointment with your stiff cargo tariff of Rs.20/kg to evacuate items from north east to mainland India.

Mr S Bhattacharjee, Managing Director, indicated this during our meeting yesterday in Guwahati.

Since you on behalf of Jet Cargo expressed a desire to explore biz opportunities for your airlines, I am writing this to you.

Am back in Delhi but will be away in Pune till 9th Dec.

If you are planning a trip to Delhi next week, we can meet in the office of Capt Pawanexh Kohli in this regard.

Look forward to hearing from you.

Date: 11-12-2012

**Attn: Mr Anil Kumar Gupta, Managing Director,
Concor India**

Dear Mr Gupta,

Greetings.

Ministry of Agriculture has set up a National Committee on Supply Chain & Logistics recently and as a Member of this Committee, I had spent 35 days in Assam and Arunachal recently.

My brief was to study how growers in the north eastern states can be assisted in their post-harvest marketing initiative.

In fact, a few weeks ago, I recall hearing one of your senior officials (I reckon it was Mr Shahnawaz Ali) present at the meeting called by Secretary (Agriculture), Govt of India, talking about horti train performance.

Given the lack of adequate road infrastructure in Arunachal, there was a lot of discussion on whether horti train can come in handy to move horti produce to various parts of India from Arunachal in particular.

In this regard, I wish to touch base with the project head in charge of Horti Train to understand its full ramification.

Am based out of Delhi.

Seeing your assistance in this connection.

Date: 16-12-2012

From: Ramesh Kumar [mailto:supplychainindia@gmail.com]

Sent: Sunday, December 16, 2012 3:58 PM

To: 'Arunachal Horticulture'

Cc: 'advisor-nccd@gov.in'

Subject: NORTHEAST TRIP: Arunachal - REQUEST for latest data

Dear Mr Narang Tani,

I believe the Agri Expo 2012 held last week in Itanagar must have been a super show.

While I have already made an informal presentation of my visit to your state, the final report is in the making.

- (a) District wise, crop-wise data on acreage under cultivation and yield per acre over the **past three years**
- (b) Data on sale of horti produce district wise, fruit wise for past three years
- (c) A copy of MOU that horti department has signed up with flori-exporters in Pasighat.
- (d) A copy of MOU signed with flower exporters of rose at Rupa
- (e) A copy of agreement signed between Ziro Kiwi Club and Tata Amalgamated.
- (f) A copy of the complete document on the proposed Horticulture Produce Marketing Board.

Relevant **ppt** is also welcome.

Will be grateful if you can push this as early as possible.

Date: 16-12-2012

Dear Dr Avir Bhaw,

Greetings.

Dr Doi Ado, ex-minister in the Govt of Arunachal Pradesh, passingly mentioned your name during my recent interaction with him at his Aalo residence.

Briefly put, I was touring Arunachal as part of my study to understand post harvest marketing initiative in north eastern states under the ministry of agriculture and that is where I ran into Mr Ado.

He said you, representing some European agency, is trying to help him market his produce overseas.

Am based out of Delhi and wish to meet you to understand about your desire to help Arunachali horti-producers.

Next week, I will be away in Jaipur.

Look forward to meeting you post-Christmas.

Meanwhile, if there is any ready input you wish to share, I will be grateful.

**Attn: Mrs Jayashree Mukherjee IAS, Inland Waterways
Authority of India, Noida**

Dear Mrs Mukherjee,

Thanks for the valuable time you spared this morning to discuss the above subject.

The task was made simpler thanks to you holding Joint Secretary post in DONER before the present assignment and your exposure to NE and its challenges.

There is a greater resolve to find a viable solution to the post-harvest marketing lacunae under the NCCD-NCSL dispensation, ably guided by the Inter Ministerial Group in this regard.

We are also examining the horti-train route by taking the train upto Tinsukia/Dibrugarh.

On the ground in Arunachal, growers have begun to form Farmers Management Group and therefore, the issue of aggregation at the state level – which you raised – is being addressed.

Chief Engineer Mr R P Khare, who joined us during the morning discussion, is also gungho on how the Brahmaputra/Siang River can be put to better use for helping Arunachali growers.

The fact that country boats ply on Brahmaputra/Siang ferrying vegetables and IWAI is operating at Karimganj, the gateway to Bangladesh(!) for Arunachali fruits gives a lot of hope of cooperation between various arms of the Central government.

Madam, finance should not be a cause for concern given Central government's commitment in this direction.

If IWAI can come out with a detailed proposal – because NCCD has no technical expertise in this connection – Ministry of Agriculture under whom NCCD-NCSL is operating will respond positively.

If necessary, a meeting between Capt. Pawanexh Kohli, Chief Advisor, NCCD-NCSL and you and your officials can be arranged at a mutually convenient time.

Kindly advise,

Date: 22-12-2012

Ramesh Kumar <supplychainindia@gmail.com> 22 December 2012 09:35

To: prashant.chaturvedi@metro.co.in

Cc: Pawanexh Kohli <advisor-nccd@gov.in>, "Shailendra Kumar (Director NCCD)" <shailen.kumar@ias.nic.in>, Surender Kaul <skkaul.nhm@gmail.com>, Arunachal Horticulture <arunachalhorticulture@yahoo.in>, shahnawazali@concorindia.com

Attn: Mr Prashant Chaturvedi, Head – Fresh SCM, Metro South, Bangalore

Dear Mr Chaturvedi,

Greetings. Courtesy Deeso Manjila of Hyderabad, I got to know you.

Arunachal, as you know, is horti-agri rich with exotic fruits and vegetables grown organically (zero-chemical impact).

I had the chance to travel for 3 weeks in Arunachal last month for a study of post harvest marketing initiative on behalf of Ministry of Agriculture, Govt of India.

Arunachal's kiwi, oranges and pineapple among others have not reached mainland Indian supermarkets and food courts.

We continue to import from New Zealand and Europe for kiwi particularly.

We wish to explore how Metro can access these organic fruits and all-season vegetables for merchandising through your outlets.

Horti-Train, managed by Concor, is also being roped in for movement of fresh vegetables and fruits to the nearest railway stations in mainland India from northeast (Tinsukia/Dibrugarh).

For your info, Horti-Train carries bananas from Bhusaval in Maharashtra to Kolkata/Guwahati in east and north east.

They can easily return with Arunachali fruits/vegetables anywhere in India.

Am based out of Delhi and would be interested in exploring business opportunities to help Arunachal farmers ably assisted by Arunachal Horticultural Marketing Board.

Look forward to hearing from you,

Cheers

--

Ramesh Kumar

Member, National Committee on Supply Chain & Logistics (NCCD-CSCL)

Ministry of Agriculture, Govt of India

New Delhi/India

Email: supplychainindia@gmail.com

Linkedin: www.linkedin.com/in/rameshkoman

Website: www.10000kmonindianhighways.com

Mobile: +919711544181



Study Tour by
Committee on Supply Chain and Logistics

Special thanks to Shri Ramesh Kumar and for the guidance from officers in North East.

Images from Tour

Farmers @ Sissen displaying ginger that was allowed to perish because the price of Rs.2/kg was unacceptable to these farmers.



Hanging bridge of 3 ft wide x 280 metres – unmotorable. 400 member basti on other side who grow multicrop – oranges, large cardamom, ginger, black pepper, jatropa, etc. In the absence of motorable road, carry headloads of 20 kg per trip on this bridge.



Images 1

Photographs by Ramesh Kumar during visit to NE States in November 2012

With Mantulu Tayang, owner of 7500 orange trees on roadside orchard. Sells at Rs.1/fruit.



Tasting farm fresh pineapple at Khujum Tamai's orchard with Tezu HDO & team



Images 2

Photographs by Ramesh Kumar during visit to NE States in November 2012

Karimganj Buyer @ Roing – Mohamed Eqlas Uddin Ahmed



With farmers @ Sissen (on the way to Pangin)



Images 3

@ Tezu with HDO Siafour Rahman & his team



Progressive farmer Bacham So Tayang (lack T shirt) @ Tezogam village, Tezu



Gopal Varma (Extreme right) with his cousin and uncle (extreme left) @ their vegetable yard, Tezu. Uncle came 35 years ago. Gopal came 15 years. Paying Rs.5,000 to Arunachali farmer per year and grows all vegetables. Sort of land leasing. Tried selling veg in Dibrugarh (6-8 hours away) once but could not manage transport. Gave up. Sells to middlemen, but helpless.



Images 4

At Upper Lohang Village, Difraling Tindia manages her orchard single handedly with her fauji hubby away always.



Soyalum Takliang family – cousins doing farming separately, but from adjacent orchards. Never thought of clubbing their yield for better price negotiation with Karimganj gang. Maybe their agendas/needs are different!



Images 5

Outside Chowkham govt nursery with HDO Chaudhry & team



Litchi farmer Kheram says his dependence on Karimganj boys is inevitable because he knows no market knowledge.



Images 6

With the Medo family – oranges again @ Kamlang village. No help in marketing so far.

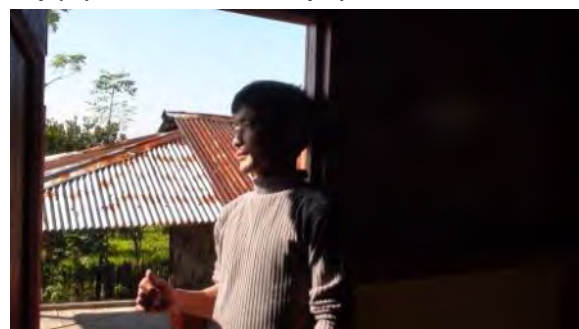


With a family of growers of arecanut, ginger, orange, litchi etc. at Kamlang, village



Images 7

Brilliant, enterprising Solemso Ama, progressive farmer @ Wakro. He sells directly with no Karimganj boys in between. DHO Ramanand Singh says he is the best farmer in town.



Karimganj trio @ Wakro (L): Faisal Islam, Abdul Aziz (bearded) & Dinesh Singh – all own small shops in Wakro and buy oranges for export to Bdes via Karimganj. Operating for more than 15-20 years.



Images 8

At the office of HDO-Wakro Ramanand Singh (seated to my right) with Karimganj gang & orange grower Soto Thalal (extreme right). He sells to these buyers for years. Never tried direct selling like Ama.



Minonge Lingli at his orange orchard with DHO-Roing Rangmin Sora and Graftor Dhanpal Singh. Manages alone. Children studying college in Pune/Bangalore.



Images 9

Pineapple grower Mosacho Eklo (Roing) happy selling pineapple at Rs.5/piece at his farmgate. Thinks beneath his dignity to go into market and sell!



Ate Tapo of Roing wants trade routes to China, Bhutan and Nepal be opened.



Images 10

Roing's Jowar Moyang (second from left in knickers) is a prominent ginger grower. He and his team make good money. Even if they lose money 2-3 years, the subsequent year fetches them excellent returns. So not worried much.



With the orange farmer Jommy Mele family (man in the centre). Son Rome Mele, an MBA from Bangalore is keen to set up food processing unit in Arunachal.



Images 11

Chiliko Meto, Zilla Parishad chairman and orange farmer (now into rubber too) got his first harvest this year. Unfortunately sold at 70 paise / fruit to Karimganj buyer Gowri Shankar, though the govt nursery in Roing is selling at Rs.1.60 per piece to the same guy.



5 km away from farmgate in Roing, oranges sell at Rs.6/piece purchased at Rs.1 or less. Pineapple, bought at Rs.10/piece, sell at Rs.25 and above!

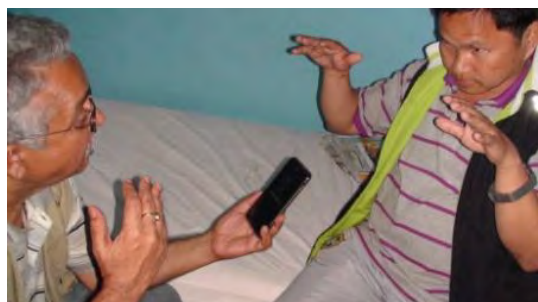


Images 12

Former Roing DC in charge Somu Linggii, also ran a NGO for sustainable agriculture in the tribal belt, says the Idhu community (orchard owners mostly) have to overcome their reluctance to be seen as sellers in the marketplace. They believe strongly that selling is beneath their dignity and hence sell it to anyone at any price!



Dr Ista Pulu, Gynaecologist at District Hospital and an orange orchard owner and an Idu, confirms the low self esteem of his tribe for poor price realization. He tried selling ginger to Haryana traders for 3 years but felt cheated. Gave up since then. He runs his diagnostic clinic and pharmacy plus runs an Outpatient clinic.

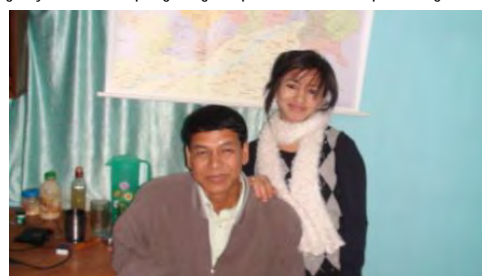


Images 13

Naktong Lego, President of Roing Horticultural Society, is like a bull in china shop. He barges in and demands that he be heard. DHO-Roing does not recognize his contribution, he alleges. But the story is that the society, first of its kind, floated by local growers disintegrated because of this man's strong arm methods. But he was one of the largest growers once upon a time, but now in decline.



Dature Mulli is an enterprising businessman. His 60-hectare orange orchard is the only one I saw which was well laid out and maintained. He also sells lumpsum to Karimganj. Wants to set up food processing unit as joint venture. He can give raw material and land. The partner has to bring in money for machinery and running expenses. He does not rate Itanagar bureaucracy highly. Daughter Umi Mulli, 28 years, with a MBA to boot from Bangalore, is assisting father now. On her input from Bangalore, father sees potential in pomegranate in mainland India. So he visited Calicut, met a pomegranate farmer, bought some saplings and planted two months ago and watching. He also brought rubber saplings and plans to get into it big way. He needs help in getting a JV partner for his food processing unit in Roing.



Images 14

DHO-Pasighat Balom Apum, SDSO K Kumar, HDO Oter Gao at their office. Apum, a native of Pasighat, recalls his days when Brahmaputra used for trade by British and he himself carrying Pumpkin in boats!



With Tasum Tasung and Talem Tasung and others – prominent orange farmers who sell together at Pasighat to Karimganj boys! Give us vehicle and diesel to sell our produce in Guwahati, says they. Transport subsidy! Tries to sell his produce through Roing Bote Trust (NGO managed by them).



Images 15

Otik Tai and his wife, got this banana plantation with Technology Mission help. Sells a bunch of 100 bananas at Rs.50. Happy.



With members of women cooperative polyhouse of anthurium @ Pasighat. Through MoU route, they got their polyhouse and other help for the first two years from an flower exporter. Post MoU expiry, they are on their own and finding it difficult. But prodding on. Except Itanagar and Pasighat, they don't have a market. Demand for large quantity of flowers from Bangalore and delhi came, but they could not ensure such large quantity. Need marketing support. Help us, they plead.



Images 16

Jokud Modi and wife at their 35-year old pineapple, balancia/mosambi, ginger orchard. He joined as Village Level Worker and built his orchard. Once drove 5 truck load of ginger to Kolkota and then onto Delhi. He was promised Rs.8/kg. But on reaching the buyer's doorstep, they asked him to give at Rs.2/kg. Then he drove to a Lucknow masala company and requested them space to dump his wasted ginger. Cheating north Indians, he alleges. So he is comfortable selling to Karimganj gang and in small quantities in local market.



Dr Ajit Pandey, Dean of College of Forestry and Horticulture, Pasighat maintains that Arunachali growers are not serious about horti biz. Only when they move away from the 'contract seeking' binge and focus solely on horti, the state can emerge as horti hub. Not otherwise.



Images 17

Tell government not to remove middlemen totally. They are our lifeline. Sarkari officials can't do anything in marketing. Yes, karimganj gang is a necessary evil, tell these orange growers at Tekong village, near Pasighat.



One to one chat with Hon'ble Industry Minister Mr Tapong Talah, Govt of Arunachal at Pangin, his hometown and constituency. He talks about Delhi not knowing ground realities and how their demands are not fully met. He talks about how Arunachal can emerge as power house on its hydro strength but laments the anti dam movement. Wants to give a big push to food processing, but none coming due to power and lack of road infrastructure. NH 229 – Trans Arunachal Highway under way – may take 5-6 years for completion, because of slow release of Prime Minister's Package for this vital activity. Second installment is released so far.



Images 18

Progressive farmer Tagum Sitang at Pangin displays his large cardamom dryer, courtesy state Horti Department.



He is exploring "mithun mirchi" or Manipur mirchi also. Ornamental as well as well priced commodity. He is also PRO for Trans Arunachal Highway! Did I not tell you that no one is focused on horticulture!



Images 19

Meeting at Industry Minister's residence in Pangin with farmers where I am asked to explain the purpose of my visit.



Taloka Darang's wait of 4 years to set up food processing unit will be over soon. Building and machinery ready. Power and water connections got now! He has over 10,000 Orange trees! Just behind his processing plant. No marketing plan yet in place!



Images 20

Tarang Taga of Aalo is the darling of DHO-Aalo. He runs an NGO successfully. Over 500 farmers benefit through him. He buys their ginger at Rs.7/kg, sells at Rs.10 after cleaning, under organic certification and arranges SBI credit as well. Talk of the town, actually. Well organized. Role model.



Tabong Talmut is hired by the Tatas to prepare a comprehensive of farmers in this district comprising their farm size, crop, etc. for Rs.7,000 per month. Smart move to collect authentic data at dirt cheap rate!



Images 21

Obang Tamuk at Rengging village (green jacket), owning orange and large cardamom, broke the Bangladesh high tariff story. How Bdeh levies hefty duty on Indian oranges, cardamom etc. Linked me with karimganj broker Badrul Haq who elaborated on the Bangladesh practice.



A galo tribesman pointing to DHO-Aalo Karyom Doji and HDO Henrik Basar where he is cleared trees for the proposed banana plantation assisted by Horti department.



Images 22

Bonge & Jumdo Bagras of Bagra village, near Aalo, a pineapple belt, talking about their marketing challenges. Never exchanged notes with their neighbours so far. Want to know how FMGs will be of any help in getting a better price? They sell to Indian army through middlemen from Dibrugarh/Tinsukia via tenders. Why not directly, they ask... Jai Jawan, Jai Kisan!



The shutdown food processing plant at Nigmoi, Aalo. Need a quick revival through private sector participation.



Images 23

Former minister Doi Ado, now chairman of Siang Farmers Association (1 year old) and an orange/large cardamom grower, says Assam is a millstone around Arunachal's neck. Needs Arunachal-Assam to sort out transport/RTO challenges.



Mr Narang Tani, Dy Director Marketing, Govt of Arunachal who is spearheading a revolution in this state. His seniors (Joint Directors and Directors) are not attuned to progressive thoughts. It is heard that these seniors will be in office till 2018-9. Only then Tani can make it to the top. Right across the state, HDOs, DHOs say that Tani needs a big push to the top post to usher in marketing initiative, unhindered. If he is allowed to wait till 2018-9, then he may lose steam.



Images 24

Kalung Bida, President of Kiwi Growers Club at Ziro, (man in the centre) has scuttled the Tata buy arrangement: Tatas ready to buy 60-100 gm range kiwis. He and couple of farmers said take all or leave it. Tatas walked out. Many farmers who met next day felt they should not have allowed this to happen. Should have agreed and thought of ways to dispose off the rejects.



Storage of kiwi post harvest at a farmer's house... in Ziro



Images 25

Binned kiwi at another farmer's place... in Ziro



Brilliant, novel temporary cold storage – low cost variety in Ziro. (read my mail for description of this jugaad!)



Images 26

At a farmgate with caretaker of large cardamom plantation which also has installed a dryer while DHO Ziro Bullo Tama looks on.



Large cardamom farmer, who uses Spice Board dryer, and gets Rs. 700/kg for his produce in Ziro.



Images 27

Likha Tamin (green T shirt) bought oranges at Rs.1.50/fruit in Ziro, brought to Ganga market in Itanagar and sells at Rs.6/fruit. En route, he has to pay hefty to RTO/ and Assam police and extortionists. His profit says he will be Rs.2 per fruit at least! He brought 50000 fruits and confident of selling it in 4 days in Itanagar.



Meeting with Mr Hage Kojeen, DC, Govt of Arunachal at Itanagar. Mr Puryakstya, Marketing Board Director (retiring soon) and Mr Jombo Rattan, Director (Horticulture) are listening to the 90 minute briefing session of my visit to Arunachal attended by a dozen officials.



Images 28

Meeting with the Budumbas of Dirang circle. Most recognized and hard working farmers. Son, an BSC Agri graduate from Assam Agri University, works for Horti department and looks after farming. Vetting a tripartite JV proposal with Guwahati company and an ex-WallMart friend to push produce into mainland. Experimenting with ripening of kiwi at Guwahati successfully selling in local market (Guwahati). Huge apple orchard. Expanding. Father exploring a club of temperate fruit growers club. These people waste nothing. Everything is used: peel, seeds, pulp in one form or another. Innovative. Role model again. (Senior most HMO Kewalanand Pandey (in suit), retiring in 18 months, but full of beans!)



Walnut and kiwi farmer Gompou Monpa of Sangti valley in Dirang (in the middle), related to the Budumbas, is confident of making it big in walnut and kiwi. Currently, his main source of income is coming from 'contract' to build roads, culverts etc.



Images 29

Dr D P Singh, Horticulturist and head of Regional Apple Research Lab (retiring June 2013 and holding the rank of Dy Director level) praises the Budumbas. For marketing to succeed at district and village level, he recommends that progressive farmers like Budumba senior should be put in the front so that he will be able to roll in his colleagues. Business sense need to be cultivated among Arunachalis, says he.



DHO-Bomdila Ngoichung Phoichulpa (extreme right), himself a kiwi farmer, understands the size issue of kiwis in selling. Research, he says, is underway to ensure right size, market-acceptable grows and also gestation period is reduced to get more involvement and passion among Arunachalis. HDO Hibu Dante (extreme left) is for Minimum Support Price.



Images 30

Members of Rupa Farmers Club: (L to R) – R N Musabi (man in cowboy hat), ex-minister Tsering Gynrme and Chief Patron of RFC, Nmit Hongchi, President of Club, Wangdi Karma Shertukpen, a member at minister's residence, Rupa. Food processing unit is underway with NGO Inspire managing it.



Govt money going waste at Rupa. Farmer given a polyhouse for rose gardening has abandoned after MOU expired and marketing he could not handle on his own. Horticulturist and HDO Rupa G P Dubey (to be taking charge of Head of Shergaon Govt Farm March 2013) has written to govt to permit such rose farmers to switch over to vegetable. Some who have done this shift on their own are doing well. But what happens to the original objective of growing high value item like roses? Dubey says unless marketing support can be provided, expecting Arunachali farmers to do it on his own is too much. Even the nearby Tibet monastery which got a polyhouse for roses with govt assistance switched over to vegetables. It is said vegetables have more takers than rose flowers. By the way, women don't wear flowers in Arunachal and Buddhist temples don't accept flowers as offerings, heard.



Images 31

NE Post harvest Infrastructure Survey (CSCL - RK)



Date of Visit:	11-Jul-12	Year Commissioned:	1-Mar-06
Facility Name:	Karnitara Cold Storage		
Address line1:	Udyog Nagar, Makum Road		
Address line2:	Tinsukia 786125 Assam		
Contact person:	Tejpal Khandelwal	9435037070	

Distance - Name	Remarks if any
Nearest Highway: 37 Assam Tinsukia Road	The best among the 5 visited in Assam. Well maintained.
Nearest Rail/Air: 6 Tinsukia	
Nearest Market: 3 Tinsukia	

Type of Infrastructure:	Number	Temp °C	Remarks (Age, Operational, Seasonal, Not in Use)
Pre-Cooler	N	0	>10°C
Cold Store	Y	6	>10°C
Pack House	N		
Others (Ripen, etc)	N		
Reefer Trucks	N		

Type of Produce Handled:	Name Product types	Temps °C
Single	N	>10°C
Multi	Y	Potato, Apple, Pears, Chilli (dry)
Horticulture	Apple, Pears (China, Kashmir), Kinnow from Punjab.	0°C
Meats		0°C
Fish		0°C
Other	Pharma ready, but centralised in Guwahati. No scope	>0°C
Other		

Type of refrigeration	Manufacturer Name/Model	Refrigeration Capacity in KW or BTU, etc
DX Freon System	N	ODU
Ammonia	Y	ODU
Other (explain)		ODU
Evaporators	IDU	2 Nos per chamber

Remarks if Any

--

Refrigerated Chambers

Number of chambers -	6	Vol	Floor	Size (LxBxH)	ft/Mtr	Temp °C	In use?
Storage Capacity	1	ft ³				10	Y
	2	ft ³				10	Y
	3	ft ³				10	Y
	4	ft ³					Y
	5	ft ³					Y
	6	ft ³					Y
	7	ft ³					Y
	8	ft ³					Y

Remarks if Any

Apple, Pears(kept at 0C) are small chambers vis a vis potato.

Insulation Type in Use

PUF, thermocol slab
Rockwool, etc.

Thermocol

Manpower Deployed

	Number	Training or Certification	Permanent?
Warehouse Manager	1	B com	Y
Reefer Technicians	1	Expeirned (Pinku Sinha)	Y
Tally clerks	1	Managerhandles this portfolio	Y
Accountant	1	Manager handles this portfolio	Y
Shift workers	6	contract. Qty varies	
Others			

Attends in season

Power Backup and availability

	Capacity	Fuel or Consumption
Back up generators	410 KVA	NA annum (ltrs per month, annum, day)
Grid Transformer size	250 KVA	NA (Grid hrs per day, etc)
Power Monitoring capability	N	Manual control of Consumption

Ancillary Equipment / Info

Humidifier used:	Y	Air Ventilation:	Y	Firefighting:	Y	Air curtain on Doors:	Y
Fork Lifts used:	N	Conveyor Belt:	N	Shaded Truck Parking:	Y	Strip Curtain on Doors:	N
Racking system:	N	Cargo Lift:	N	Unloading Ramp:	Y	Maintenance Contract:	Y

Capacity Utilisation

	(in approx %)	approx KWH or ₹
This Year	95%	Energy Bill 600 litres Rs
Previous Year	85%	Energy Bill

Interview (with owner or manager)

- What is business prospect, or need for cold storage infrastructure in the area?

Met owner. Keen to expand for captive consumption.

- What is business constraint or need for cold storage infrastructure in the area?

- What business model is used (rental, captive, part of suply chain service, mixed)?

Captive.

- What is assistance if any is sought from Govt of India?

Cheaper finance from banks and NHB subsidy and lower power tariff.

- Have they heard of NCCD, would they become members?

- Is there need for any cargo handing training programs?

No.

- Is any machine operating or maintenace training needed?

No training needed.

- What kind of infrastructure improvement needed for their business? (roads, trucks, storage, etc)

- Have they heard of Negotiable Warehouse reciepts by WDRA?

General Remarks

Upkeep of Facility: The best of 5 I have visited
Hygiene Surrounding: Good
Others: See images attached in Appendix E





NE Post harvest Infrastructure Survey (CSCL - RK)



Date of Visit:	30/10/2012	Year Commissioned:	30/05/2008
Facility Name:	Singimary Cold Storage		
Address line1:	Village Singimary Bazaar		
Address line2:	P O Roumari, Pin 781104		
Contact person:	Kamlesh Rana (owner)	9864013800	

Distance - Name	Remarks if any
Nearest Highway: 31	multi-level (3 tier) . Tried to store flower for a short while, but abandoned
Nearest Rail/Air: 2	
Nearest Market: 0	
Assam Tinsukia Road	
Agathori Railway Stn	
Singimari	

Type of Infrastructure:	Number	Temp °C	Remarks (Age, Operational, Seasonal, Not in Use)
Pre-Cooler	N	0	>10°C
Cold Store	Y	2	>10°C
Pack House	N		
Others (Ripen, etc)	N		
Reefer Trucks	N	0	

Type of Produce Handled:	Name Product types	Temps °C
Single	Y	Potato
Multi	N	
Horticulture	Flowers in season	>0°C
Meats		<-18°C
Fish	Fresh fish only, no frozen fish here	0°C
Other	Sometimes stores medicines in off season from Jul-Sep	>0°C
Other		

Type of refrigeration	Manufacturer Name/Model	Refrigeration Capacity in KW or BTU, etc
DX Freon System	ODU	
Ammonia	Y	Frick India
Other (explain)	ODU	
Evaporators	IDU	3 Nos per chamber

Remarks if Any

OK Condition. Total height: 18 x 9 x 4.6 m (LxBxH). Spares available. Managed by a school final Pintoo Malik who knows and operates from experience, guided by a M Tech Manager.

Refrigerated Chambers

Number of chambers -	3	Vol	Floor	Size (LxBxH)	ft/Mtr	Temp °C	In use?
Storage Capacity	1	500	MT	1		10	Y
	2	500	MT	2	See Remarks ab	10	Y
	3	500	MT	1		10	Y
	4						
	5						
	6						
	7						
	8						

Remarks if Any

Owner not present. Manager away on leave. Pintoo Malik can't share much info.

Insulation Type in Use

PUF, thermocol slab Thermocol (since 2008)
Rockwool, etc.

Manpower Deployed	Number	Training or Certification	Permanent?
Warehouse Manager	1	M.Sc (1 year)	Y
Reefer Technicians	2	Pintoo Malik &	Y
Tally clerks	1	Manager handles this portfolio	Y
Accountant	1	Manager handles this portfolio	Y
Shift workers		Loading/Unloading contract labour	
Others			

Attends in season

Power Backup and availability	Capacity	Fuel or Consumption
Back up generators	Y	160 KVA 100 monthly (ltrs per month, annum, day)
Grid Transformer size	150 KVA	depends on power availabil (Grid hrs per day, etc)
Power Monitoring capability	N	Manual control of Consumption

Ancillary Equipment / Info

Humidifier used:	N	Air Ventilation:	Y	Firefighting:	Y	Air curtain on Doors:	N
Fork Lifts used:	N	Conveyor Belt:	N	Shaded Truck Parking:	Y	Strip Curtain on Doors:	N
Racking system:	N	Cargo Lift:	NA	Unloading Ramp:	Y	Maintenance Contract:	Y

Capacity Utilisation		(in approx %)		approx KWH or ₹	
This Year		75%		Energy Bill	KwH
Previous Year		< 75%		Energy Bill	

Interview (with owner or manager)

- What is business prospect, or need for cold storage infrastructure in the area?

Owner not available. Manager on leave. Pintoo Malik is too junior to respond.

- What is business constraint or need for cold storage infrastructure in the area?

- What business model is used (rental, captive, part of supply chain service, mixed)?

- What is assistance if any is sought from Govt of India?

- Have they heard of NCCD, would they become members?

- Is there need for any cargo handling training programs?

- Is any machine operating or maintenance training needed?

- What kind of infrastructure improvement needed for their business? (roads, trucks, storage, etc)

- Have they heard of Negotiable Warehouse receipts by WDRA?

General Remarks

Upkeep of Facility: Ok.

Hygiene Surrounding: Ok.

Others: See images attached in Appendix A



L to R: Pintoo Malik with Manager Pramod Kumar Patil (in half knicker)





NE Post harvest Infrastructure Survey (CSCL - RK)



Date of Visit:	30/10/2012	Year Commissioned:	
Facility Name:	Reliance Cold Storage		
Address line1:	Chowkigate, Sangsari		
Address line2:	Kamrup Rural		
Contact person:	Binit Lohia, Managing Director	9854041107	

Distance - Name	Remarks if any
Nearest Highway: 31	Flowers, cheese and potato at same venue and same temperature! This cold storage situated inside a cement plant!
Nearest Rail/Air: 2	
Nearest Market: 0	

Type of Infrastructure:	Number	Temp °C	Remarks (Age, Operational, Seasonal, Not in Use)
Pre-Cooler			
Cold Store	Y	1	>10°C
Pack House			
Others (Ripen, etc)			
Reefer Trucks	0		

Type of Produce Handled:	Name Product types	Temps °C
Single	N	
Multi	Y	
Horticulture	Flowers in season (not more than 2-3 days for every consignment)	>10°C
Meats	Yes	0°C
Fish	Separate chamber (Fish & Meat)	0°C
Other	Cheese, Potato, Cashewnut	>10°C
Other	Pharma occasionally	

Type of refrigeration	Manufacturer Name/Model	Refrigeration Capacity in KW or BTU, etc
DX Freon System	N	ODU
Ammonia	Y	ODU
Other (explain)		ODU
Evaporators	IDU	2 Nos per chamber

Remarks if Any

Poorly maintained. Situated inside a cement plant. Dust all around. Except fish and meat kept separately. Rest all under same roof and same temperature.

Refrigerated Chambers

Number of chambers -	3	Vol	Floor	Size (LxBxH)	ft/Mtr	Temp °C	In use?
Storage Capacity	1	1000	MT	1	NA	10	Y
	2	1000	MT	2	NA	10	Y
	3	1000	MT	multi	NA	10	Y
	4	1000	MT	multi	NA		Y
	5	1000	MT		NA	0	Y
	6						
	7						
	8						

Remarks if Any

Cold Storage manager on leave. So, cement plant supervisor managing cold storage. He has no inputs. Asked to monitor entry and exit of goods!

Insulation Type in Use

PUF, thermocol slab
Rockwool, etc.

Thermocol

Manpower Deployed

	Number	Training or Certification	Permanent?
Warehouse Manager	1	B Tech (Biswajit Dass)	Y
Reefer Technicians	2		Y
Tally clerks	1	Manager handles this portfolio	Y
Accountant	1	Manager handles this portfolio	Y
Shift workers		Loading/Unloading contract labour	Y
Others			

Attends in season

Power Backup and availability

	Capacity	Fuel or Consumption
Back up generators	Y	NA KVA NA monthly (ltrs per month, annum, day)
Grid Transformer size	NA	KVA depends on power availabil (Grid hrs per day, etc)
Power Monitoring capability	N	Manual control of Consumption

Ancillary Equipment / Info

Humidifier used:	N	Air Ventilation:	Y	Firefighting:	Y	Air curtain on Doors:	Y
Fork Lifts used:	N	Conveyor Belt:	N	Shaded Truck Parking:	Y	Strip Curtain on Doors:	N
Racking system:	N	Cargo Lift:	Y	Unloading Ramp:	Y	Maintenance Contract:	Y

Capacity Utilisation

	(in approx %)	approx KWH or ₹
This Year	NA	Energy Bill
Previous Year	NA	Energy Bill

Interview (with owner or manager)

- What is business prospect, or need for cold storage infrastructure in the area?

Owner not available. Manager on leave. Pintoo Malik is too junior to respond.

- What is business constraint or need for cold storage infrastructure in the area?

Owner not available. Manager on leave. Cement plant supervisor, in charge of cold stroage, has no info to share.

- What business model is used (rental, captive, part of suply chain service, mixed)?

- What is assistance if any is sought from Govt of India?

- Have they heard of NCCD, would they become members?

- Is there need for any cargo handing training programs?

- Is any machine operating or maintenace training needed?

- What kind of infrastructure improvement needed for their business? (roads, trucks, storage, etc)

- Have they heard of Negotiable Warehouse reciepts by WDRA?

General Remarks

Upkeep of Facility: Bad

Hygiene Surrounding: Bad

Others: See images attached in Appendix B





NE Post harvest Infrastructure Survey (CSCL - RK)



Date of Visit:	11-Jun-12	Year Commissioned:	
Facility Name:	Mahabir Cold Storage		
Address line1:	Gandhi Park Road		
Address line2:	Tinsukia 786125 Assam		
Contact person:	Hulas Chand Jain	9435035087	

Distance - Name	Remarks if any
Nearest Highway: 37	Oldest & pioneer of cold storage in Assam. Owner-managed
Nearest Rail/Air: 2	
Nearest Market: 0	

Type of Infrastructure:	Number	Temp °C	Remarks (Age, Operational, Seasonal, Not in Use)
Pre-Cooler			
Cold Store	Y	4	>10°C
Pack House			
Others (Ripen, etc)			
Reefer Trucks			

Type of Produce Handled:	Name Product types	Temps °C
Single	Y	Potato
Multi		
Horticulture	Orange (long ago), but no longer.	0°C
Meats		0°C
Fish		0°C
Other	Pharma ready, but centralised in Guwahati. No scope	>0°C
Other		

Type of refrigeration	Manufacturer Name/Model	Refrigeration Capacity in KW or BTU, etc
DX Freon System	ODU	
Ammonia	Y	Frick India
Other (explain)	ODU	
Evaporators	IDU	Star Cooler, Pune
		2 Nos per chamber

Remarks if Any

--

Refrigerated Chambers

Number of chambers -	3	Vol	Floor	Size (LxBxH)	ft/Mtr	Temp °C	In use?
Storage Capacity	1	3500	MT	1	NA	10	Y
	2	3500	MT	2	NA	10	Y
	3	3500	MT	multi	NA	10	Y
	4	3500	MT	multi	NA		Y
	5						Y
	6						
	7						
	8						

Remarks if Any

PUF used in two units and thermol in remaining two. PUF expensive, but excellent. Five generators (120 KVA x 2 nos, 140 KVA x 2 nos & 40KV x 1 no.)

Insulation Type in Use

PUF, thermocol slab

seeremarks above

Rockwool, etc.

Manpower Deployed	Number	Training or Certification	Permanent?
Warehouse Manager	1	B com	Y
Reefer Technicians	1	Not qualified, but experienced	Y
Tally clerks	1		Y
Accountant	1		Y
Shift workers	6	3 shift x 2 people/shift (contract)	
Others			

Attends in season

Power Backup and availability	Capacity	Fuel or Consumption
Back up generators	560 KVA	4 lakhs annum (ltrs per month, annum, day)
Grid Transformer size	550 KVA	12/18 hrs/day (Grid hrs per day, etc)
Power Monitoring capability	N	Manual control of Consumption

Ancillary Equipment / Info

Humidifier used:	N	Air Ventilation:	Y	Firefighting:	Y	Air curtain on Doors:	N
Fork Lifts used:	N	Conveyor Belt:	N	Shaded Truck Parking:	Y	Strip Curtain on Doors:	N
Racking system:	N	Cargo Lift:	Y	Unloading Ramp:	Y	Maintenance Contract:	Y

Capacity Utilisation	(in approx %)	approx KWH or ₹
This Year	60%	Energy Bill
Previous Year	90%	Energy Bill

Interview (with owner or manager)

- What is business prospect, or need for cold storage infrastructure in the area?

Plans to expand. Good trading margins. Wanting to add 7000 MT. Bank negotiations on.

- What is business constraint or need for cold storage infrastructure in the area?

- What business model is used (rental, captive, part of supply chain service, mixed)?

Captive. Rental ready at Rs.140/quintal

- What is assistance if any is sought from Govt of India?

- Have they heard of NCCD, would they become members?

Yes

- Is there need for any cargo handling training programs?

No.

- Is any machine operating or maintenance training needed?

No training needed.

- What kind of infrastructure improvement needed for their business? (roads, trucks, storage, etc)

Power scenario is bad and peace missing.

- Have they heard of Negotiable Warehouse receipts by WDRA?

Yes

General Remarks

Upkeep of Facility: Ok

Hygiene Surrounding: Ok.

Others: See images attached in Appendix C

Loaders/Unloaders don't like aircurtains. So disconnected. Strip curtains being considered.

Rate of interest is high. Banking negotiations on for 2 years. Officer kept changing and fresh set of papers asked for.

APPENDIX C / Images from Mahabir Cold Storage, Assam









NE Post harvest Infrastructure Survey (CSCL - RK)



Date of Visit:	11-Jul-12	Year Commissioned:	
Facility Name:	Greenfield Cold Storage		
Address line1:	Laipuli PO		
Address line2:	Tinsukia 786183 Assam		
Contact person:	Sanjay Sah	9435745883	

Distance - Name	Remarks if any
Nearest Highway: 37	Owner not available. Manager, not technically sound to give inputs
Nearest Rail/Air: 2	
Nearest Market: 0	

Type of Infrastructure:	Number	Temp °C	Remarks (Age, Operational, Seasonal, Not in Use)
Pre-Cooler			
Cold Store	7	>10°C	
Pack House			
Others (Ripen, etc)			
Reefer Trucks			

Type of Produce Handled:	Name Product types	Temps °C
Single		
Multi	Potato, Egg	Temps °C
Horticulture	Apple tried, but not cost effective	0°C
Meats	Egg	0°C
Fish		
Other	Pharma ready, but centralised in Guwahati. No scope	>0°C
Other		

Type of refrigeration	Manufacturer Name/Model	Refrigeration Capacity in KW or BTU, etc
DX Freon System	ODU	
Ammonia	ODU	NA
Other (explain)	ODU	
Evaporators	IDU	Star Cooler, Pune
		2 Nos per chamber

Remarks if Any

Dusty and ill-maintained equipments. Tried coldstoring cabbage, ginger etc. But failed. Now only potato and egg. Trading route. Egg, round the year. Potato, seasonal.

Refrigerated Chambers

Number of chambers -	3	Vol	Floor	Size (LxBxH)	ft/Mtr	Temp °C	In use?
Storage Capacity	1	ft ³	1	108x35x11		10	Y
	2	ft ³	2	108x35x11		10	Y
	3	ft ³	multi	108x35x11		10	Y
	4	ft ³	multi	108x35x11			Y
	5	ft ³		108x70x22			
	6	ft ³		108x70x22			
	7	ft ³		108x70x22			
	8	ft ³		108x70x22			

Remarks if Any

Trader who buys from outside Assam and sells in local market

Insulation Type in Use

PUF, thermocol slab Thermocol
 Rockwool, etc.

Manpower Deployed	Number	Training or Certification	Permanent?
Warehouse Manager	1	B com	Y
Reefer Technicians	1	Not qualified, but experienced	Y
Tally clerks	1		Y
Accountant	1		Y
Shift workers	6	contract. Qty varies	
Others			

Attends in season

Power Backup and availability	Capacity	Fuel or Consumption
Back up generators Y	435 KVA	NA annum (ltrs per month, annum, day)
Grid Transformer size 400	KVA	10 hr/daily (Grid hrs per day, etc)
Power Monitoring capability N	Manual control of Consumption	

Ancillary Equipment / Info			
Humidifier used: Y	Air Ventilation: Y	Firefighting: Y	Air curtain on Doors: Y
Fork Lifts used: N	Conveyor Belt: N	Shaded Truck Parking: Y	Strip Curtain on Doors: N
Racking system: N	Cargo Lift: N	Unloading Ramp: Y	Maintenance Contract: Y

Capacity Utilisation	(in approx %)	Energy Bill	approx KWH or ₹
This Year	100%	Energy Bill	NA KWH
Previous Year	100%	Energy Bill	

Interview (with owner or manager)

- What is business prospect, or need for cold storage infrastructure in the area?

Owner Ram Niwas Agarwal (9435035639) out of town. Sah not technically sound to give inputs.

- What is business constraint or need for cold storage infrastructure in the area?

- What business model is used (rental, captive, part of supply chain service, mixed)?

Captive (mostly) and rental occasionally to trading friends. No to agri/horti farmers

- What is assistance if any is sought from Govt of India?

- Have they heard of NCCD, would they become members?

- Is there need for any cargo handling training programs?

No.

- Is any machine operating or maintenance training needed?

No training needed.

- What kind of infrastructure improvement needed for their business? (roads, trucks, storage, etc)

- Have they heard of Negotiable Warehouse receipts by WDRA?

General Remarks

Upkeep of Facility: So-so

Hygiene Surrounding: so-so

Others: See images attached in Appendix D







National Centre for Cold-chain Development

Understanding in-transit Delays in Perishable Movement

RVRC (Reefer Vehicle Redressal call-in-Centre)

NCCD PROPOSAL

REEFER VEHICLE REDRESSAL CALL-CENTRE - 'PAN INDIA'

NEED

One of the biggest challenges faced by reefer movement ferrying perishable fruits/vegetables etc on Indian highways (state & national) is the forced stoppage anywhere on these passages by various federal and/or state authorities for 'verification' purposes of various truck and driver documents.

It is certainly desirable for such checks to ensure no illegal activities are carried out by these reefer trucks, the action spot for such inspection ought to be ONLY at interstate borders and NOWHERE else in between.

SOLUTION

To PROVIDE Toll Free access to reefer transporters/operators for Fast Track RECORDING of complaints about in-transit operational & regulatory challenges/delays. Complaints received will be centrally recorded and will be piped to relevant state and central authorities for appropriate redressal and other long term corrective action.

IMPLEMENTATION

The 24 x 7 x 365 Reefer Vehicle Redressal Call-Centre (RVRC) will be a multi-line phone access system with a website. The calls received by the RVRC shall be handled as follows:

1. Passed on to a list of local authorities (Highways, Policing, Regulatory)
2. Call records updated on the website on a fortnightly basis
3. Website can also be interactive for post-facto feedback and updates (follow-up photographs or incident reports)

RVRC will be initially funded by the Central government for first three years.

In the midterm, the service and benefits will be evaluated for a fee based structure wherein, the service seekers (reefer transporters/operators) could share the costs by paying a nominal fee to avail of this service. In the long run (phase-II) the service can also be developed to be self-sustainable through other commercial and service arrangements.

In the phase-I, the RVRC will focus on 'on-the-spot-complaint-lodging' process. The RVRC will be the one-stop medium for reefer truck operators to lodge a protest or complaint during or after certain defined event categories.

In Phase-I of RVRC, The Calling party will be required to provide the following details:

1. Name of Caller
2. Details of Driver (Name and License number)
3. Registration Number of Vehicle
4. Nature of Protest to record (Public Service)
 - i) Location of reported incident (Landmark, Milestone details etc)
 - ii) Cargo being carried
 - iii) Name of Cargo Shipper
 - iv) Name of Trucking firm
 - v) Destination (City, Town)
 - vi) Originating Point (Address)
 - vii) Opening of Sealed Doors for Inspection of Cargo.
 - viii) Delay in inspection of transit documentation.
 - ix) Delay at Toll plaza.

- x) Report of Extortion activity.
- xi) Damage to Highway/Road

In case of protests in reference to special checks by authorities, the name of officer and department of officer where available shall also be recorded.

RVRC will log the above details and this data should be available real time to the following officers or designates on list through SMS with an email as follow-up for good order:

- Ø State Transport Commissioner/Principal Secretary – Transport
- Ø State Director General of Police – Control Room
- Ø Integrated Interstate Border Control Room (on both ends)
- Ø NHAI Chairman's Office
- Ø Any other as necessary for related region.

NCCD Secretariat, Delhi will receive a Monthly Summary of such complaints along with Action Taken Report

RVRC logging will automatically create date & time input and if possible, geo-tagging of this complaint from location will be desirable.

If the complaint were to be lodged by owner – away from actual location – on the basis of inputs provided to him by his driver on the highway, he must additionally also provide:

- Ø Owner's Name:
- Ø Company Name:

ACTION PLAN

When such an EMERGENCY CALL is received, the following actions are envisaged-

- Ø Since the logged input goes REAL TIME to interstate border (that works round the clock) also, the Supervisor of that approaching/next halt should be the first intervene and advise the official wanting to conduct verification checks en route 'NOT TO OBSTRUCT & PERMIT MOVEMENT OF REEFER VEHICLE' to the next interstate border checkpoint.

This is especially when a check has already been carried out at the previous interstate border checkpoint. Hence midway verification within the same state is unwarranted.

To Ensure PROMPT ACTION, RVRC will make the FIRST CALL to the complainant 30 minutes after the receipt of the complaint.

In the absence of 'no-action report' within the stipulated time (30 minutes), RVRC will begin calling up officials designated state-wise DIRECTLY.

Again, SECOND CALL will go 90 MINUTES after the receipt of the complainant from RVRC .

This 'twin follow-up call procedure' will reinforce the belief in the complainant and/or his operator wherever he is stranded on the highway that their complaints are recorded and piped for necessary action.

A sustained awareness campaign will have to be rolled out by NCCD, educating reefer transporters, state transport commissioners, State police heads, drivers, interstate border managers before this Toll Number facility is introduced.

A MONTHLY Newsletter will be released highlighting prompt actions and feedback from reefer transport community. Automatically, this process will bring down, if not eliminating, en route harassment by state/federal officials thus leading to smooth flow of PERISHABLES.

A pilot study may be conducted on the most vital route in western/southern Indian states for 3-6 months to understand the efficacy of this system before exploring national roll-out.

BENEFITS

- Ø Bring down, if not eliminate, unnecessary stoppage and harassment of PERISHABLE movement
- Ø Improve DELIVERY Schedule and thus reduce wastage.
- Ø Greater transparency of federal/state regulatory mechanism.
- Ø Higher logistical efficiency in case of perishables.
- Ø Regular monitoring may lead to fine tuning legal provisions pertaining to PERISHABLE movement.

SUSTAINABILITY

Once the efficacy of RVRC is fully understood and appreciated, service seekers will automatically step in to fund this operation.

After appropriate evaluation during phase-I, other support on commercial matters can be undertaken as a Paid Service in Phase-II of RVRC.

- (1) Record emergency breakdown, pass information to refrigeration repair services.
- (2) Provide GPS linked location and cargo status information service to FPOs, Cargo Owners.
- (3) Provide phone based emergency technical support to minimize risk to cargo.

The final action process shall be revised and decided after all considerations are understood as this pilot project is developed.



National Centre for Cold-chain Development

**Department of Agriculture & Cooperation
Ministry of Agriculture**

-

Web: www.nccd.gov.in

Email: Contact-NCCD@gov.in

Tel: +91-11-23061595

Addr: 645, A-Wing, Nirman Bhawan, New Delhi

