

## **VanniTech Feasibility/Preparation Related Trip Report**

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### **1 Summary Highlights**

- Trip: October 15 – November 09, 2002
- The need for vanniTech is real and immediate
- VanniTech initiative has received enormous support from every direction and everyone I talked with enthusiastically welcomed our project and badly wanted us to start the project ASAP
- VanniTech will be located in Killinochchi
- Although most of the buildings in Killinochchi had been severely damaged or destroyed, a building along with a 16-room hotel in Killinochchi has been identified for the institute. Hotel would function as the hostel
- The budget has gone up significantly - \$\$\$\$
- There is a possibility of donation for all the computers needed
- VanniTech could start to function in Killinochchi in a temporary “campus” immediately
- Finding qualified/enough students is not an issue
- Its possible to hire full time lecturers/instructors
- Everyone is excited about the fact that the expatriates are starting a high-tech institute and employment opportunities will be provided after the studies
- People at every level understand the importance of English language and urgency in educating it.
- If we can achieve the goal of collecting the funds on time, I will be relocating to Vanni in January of 2003. We could start the classes by March. I intend to live in Vanni for a year to run the institute
- Following lists some of the people whom I had discussion with on the VanniTech initiative:
  - o Mr.Tamilselvan, head, Political Wing of the LTTE
  - o Mr. Thuyavan, head of TEEDOR
  - o Prof. Navaratnarajah, Chairman of The Economic Consultancy House (TECH) and also of University of Jaffna
  - o Dr. S.Mahesan, head of the Computer Science program, U of J
  - o Dr. Kandasamy, head of the Faculty of Physics, U of J
  - o Mr.Nandakumar, Director, IT Park, Jaffna
  - o Mr.Krishnakumar, Teacher-in-charge, Computer Unit, Jaffna Hindu College
  - o Mr.Arul Kumaran, Computer Lecturer, Computer Unit, JHC

- Mr. Jeyatheepan Ulagapiragasam, Director of Finance, Tamil Information Technology Association, and also a member of ITTPO/VanniTech Discussion Group, currently at University of Peradeniya
- Dr. V. Ambalavanar, Advisor to the Prime Minister of Sri Lanka
- Mr. Ravi Shankar, Chairman, TITA, Software Engineer
- Mr. Pradeepan, Director, TITA, and also Lecturer, University of Moratuwa
- Mr. Nimalan Karthikeyan, Advisor to TITA Board and also a UNDP Project Manager with the UN
- Mr. Thuraisingham Pradhbeeban, Software Engineer, John Keells Computer Services, and also a member of ITTPO/VanniTech Discussion Group

## **2 The Trip**

The VanniTech Trip took me to Sri Lanka on October 15<sup>th</sup> 2002. I was there until November 09, 2002.

I visited Vanni between October 18 and November 3, 2002. During this period, I also visited Jaffna for few days. During my trip to Jaffna, I visited, among other places, University of Jaffna, The IT Park of Jaffna, and The Jaffna Hindu College. I also had meetings with people in Colombo.

The purpose of the trip was to do the feasibility study for the VanniTech and to explore the need for such an institution under the present political, social, and economic conditions. Further, if positive results were found from such observations, to do the preliminary work for the institute. The purpose also included the finalization of the budget.

The preliminary work for the institute included the identification and evaluation of building facilities and student and staff accommodations. The trip was also expected to give us some feel for what the technical needs of Tamil people are and what vanniTech could and should be teaching. It would help us prepare the course requirements, and to find out the availability of local lecturers, students and to evaluate their qualifications. The plan also included the hiring of an administrative person in advance if such a person can be identified.

I had the opportunity to meet several people including high-ranking political, academic and administrative officials. The support for the vanniTech is overwhelming and the confidence they have on the expatriate community, ITTPO and vanniTech is very high. They expect that VanniTech could change the way they live in and bring the technology to their doorsteps. Some of them had been thinking, or according to them, “dreaming” of an institute similar to vanniTech.

The formation of ITTPO and its vanniTech yahooGroups discussion membership were made known during all of my meetings.

The welcome and the hospitality I received is a sure sign of how much they valued the VanniTech initiative and how much they wanted to have such an institution.

During my trip I had the opportunity to meet several people and participated in several meetings to discuss the establishment of VanniTech. On the political leadership side, I met Mr. Tamilselvan, head of the Political Wing of the LTTE. The Vanni region is administered by his organization. His enthusiastic support and commitment for our project was one of the highlights of the trip. His offer of any help confirmed the need for such an institution. His suggestion for a constitution for the institute reflected his long-term view of the institute. He emphasized the importance of English language and requested we offer a course to help the students.

The other important contributors were Mr. Thuyavan of TEEDOR, and Prof. Navaratnarajah of University of Jaffna and also of TECH. Both of them pretty much offered assistance, suggestions and solutions for some of the important concerns I had. I met them at several occasions and one of our meetings went well after midnight. At the end, they both said the ball was in our court to start the VanniTech as soon as possible.

It was interesting to note that most of the people in Vanni and Jaffna whom I talked with were clear about our objectives and did not confuse the VanniTech for a Computer training center.

In Colombo, Mr. Jeyatheepan, Director of TITA (Tamil Information Technology Association) and also of ITTPO/VanniTech YahooGroups discussion group, arranged a couple of very informative meetings. He also arranged the meeting for me with Jaffna Hindu College officials.

After talking to several individuals and seeing some institutions, I feel that we have to make some adjustments to our original proposed plan. As described in the VanniTech proposal preliminary document version 1.1.0, the changes were expected. The suggested changes include furniture related equipments, number of computers, vehicle, salary for the local instructors etc. As a result, the budget has gone up significantly. But I strongly feel that to maintain the expectation from ITTPO and vanniTech, to provide an institution like foundation, and considering the present economic condition of the country and the reality of the Vanni infrastructure and climate conditions, these changes are indeed needed. There are no major changes expected in the proposed courses and the programs of study.

The approximate currency conversion is U.S.\$ 1.00 = S.L. Rs. 96.50. For our calculations U.S.\$ 1.00 is converted to Rs 100.00.

### **3 VanniTech Location - Killinochchi**

Killinochchi is the biggest town in the Vanni region. It's probably the best place to locate the VanniTech. Most or all of the big buildings are damaged or completely destroyed by the war, and there are no existing private buildings that can be rented or leased for the

VanniTech purpose. However, I have made some arrangements to obtain a hotel in Killinochchi for this purpose. Along with this 16-room hotel, a complete top floor of a two story shopping building within the same “campus” will be used for this purpose. The hotel will change into hostel. Three students per room would make the hostel accommodation for 48 students, which is sufficient at the beginning. At present there is a guardroom by the entrance and a three-room office and a small cafeteria on the ground floor within the “campus.” The hotel guests are provided with meals from a restaurant nearby. The whole complex could be the temporary home for the vanniTech until we create a permanent place for it. The complex is located in the town on the main A9 highway.

## **4 Visits and Discussions**

During the trip I had the opportunity to visit and meet with several individuals and institutions. This section contains some of the meetings and the notes from such meetings. The notes indicate what was said during the discussion, but not been verified for accuracy!

### **4.1 Tamil Eelam Economic Development Organization (TEEDOR)**

I had the opportunity to meet with the head of TEEDOR Mr. Thuyavan several occasions. His commitment and support to the vanniTech didn't seem to have any limits. His assistance for the vanniTech so far is of great importance. He is determined to offer whatever assistance we need to establish the institute as soon as possible.

### **4.2 The Economic Consultancy House (TECH)**

The TECH is a NGO registered with the government of Sri Lanka. Professor Navaratnarajah is the chairman of TECH. He made the commitment of “100% support” for the vanniTech and to do all the helps. He is very enthusiastic about the project and spent a significant amount of time discussing several issues. Mr. Thas is the director of TECH and I had discussion with him on a couple of occasions. TECH is also working on to create a Technical College in Killinochchi to teach vocational studies.

TECH runs a computer-training center in Vaddakachchi, Killinochchi. Following are some information about the center

1. The Computer Training Center has about 21 computers (used Pentium, Four P4, two P4 laptops).
2. The Computer Lab looks good. It has a big air-conditioned lab with proper computer chairs etc. Computers were not networked (until I networked 2 of them using a crossover cable which I happened to have). There were a couple of printers and a copy machine. It also has a library.
3. They teach MS Office for government officers and other students.
4. The instructor is thinking about teaching ACCESS, but not sure about students' capabilities.
5. TECH is registered with World University Service of Canada (WUSC).

6. They charge students Rs:3000.00 for a 3-month course.
7. TECH is planning to teach AUTOCAD.
8. I went to the TECH computer-training center two times and watched their classes. First day I attended their class for 2 hours and found out the frustrating task of teaching the basic, from holding the mouse to clicking it, using the keyboard, and using the backspace and delete keys etc. for the first time computer users. During my second visit to the same class, I noticed the teaching of Word in detail. One of the things being taught was the “Word Counts” feature under “Tools.”
9. P4 machine can be built for about Rs:60,000.00 with 14” monitor.
10. A request came for self-learning English language audio CD or Tape.

### 4.3 University of Jaffna

Prof. Navaratnarajah from Faculty of Agriculture, arranged a meeting for me with Dr. Mahesan, the head of Computer Science program, and we were later joined by Prof. Kandasamy, the head of Faculty of Physics. Dr. Navaratnarajah and Dr. Mahesan had prior knowledge of VanniTech initiative, and had read VanniTech proposal document. Dr. Kandasamy too heard of the initiative.

The meeting lasted around 1 hour. During this meeting several important issues came up, and all of my concerns about finding qualified students disappeared. It was a very productive meeting that gave me an insight to the technical status of Jaffna students.

Dr. Mahesan mentioned that he had read the vanniTech proposal and he had good impression about the proposed programs.

The U of J selects around 30 to 40 students each year for the honors program in Computer Science. They don't have a degree program in Computer Science, but provide the honors program. The majority of these graduates are employed, but not necessarily their employment matches their qualification, some are unemployed and others are under-employed. Their curriculum was not meant to meet the need of the country.

For selecting students for their Computer Science program from the admitted, U of J uses the students' A/L score in the following:

- Combined Math
- Physics
- Chemistry

They however do not look for any grade in English language. This program has been going on in the university for the last 12 years.

Following are some observations from the meeting:

- If the VanniTech programs are implemented they will be better than the program offered by U of J.
- Qualified technicians are urgently needed who can fix and maintain the hardware. The technicians have to come from Colombo to fix the hardware and they charge a lot of money.

- U of J students spend about Rs 3000.00 – 4000.00 per month for lodging and food while they get their free education.
- One of them suggested, when asked, VanniTech could charge about Rs 5000.00 – 6,000.00 per month for the package of hostel/education.
- An English class, which can develop the communication skills in English, was highly recommended.
- VanniTech could ask the following as the minimum qualification for admission:
  - o Combined Math (or from old syllabus, Applied and Pure Maths) Credit in A/L
  - o Physics – Credit in A/L
  - o English – Credit or Pass (the issue came up as finding a student with “C” in Jaffna area is very easy, but will be an issue for the students from the Vanni area.
  - o If the program offered by VanniTech is attractive, then finding enough qualified students will not be an issue. By “attractive” one meant, good courses and employment opportunity.
- If vanniTech says the employment is guaranteed, then it will receive more than 50 applications for admission from U of J science graduate alone
- A request also came for our visiting instructors (Tamil Expatriate Professionals) to offer courses at U of J as well.
- Prof. Navaratnarajah who also heads the Carrier Development Center at the University, said, he alone could give vanniTech 50 U of J unemployed Science graduates. His office finds suitable employment for their graduates.

#### **4.4 The IT Park, Jaffna**

I had a meeting with the director of IT Park, Jaffna, Mr. Nandakumar. Following are the notes from the meeting:

- IT park is a Rs: 20 Million project (U.S.\$200,000.00)
- It has around 50 full and part time employees
- It has 130 Pentium 3 computers running Windows XP Professional
- About 5000 students have completed their various programs
- They offer certification and diploma. Certification is a 3 month program while the diploma is 6 months.
- It offers Certification in the following:
  - o Word
  - o Excel
  - o Visual Basic
  - o Java
  - o C++
  - o HTML
  - o H/W (towards technician level work)
- for the certification they charge Rs: 1500.00 for the languages and Rs: 700.00 for the software packages for 3 months.
- For the diploma they charge Rs. 3200.00 for h/w for 6 months and Rs.2400.00 for the packages.

- They have also started a Diploma in IT, a one-year program that they have started 4 months ago. They charge Rs.5000.00 for a semester, and it's a four-semester program. But duration was not clear, and it sounded like it would go on for more than one year.
- They have developed some database using visual basic for their ministry. They also developed online exams for their students
- Their education is not geared towards employment and their focus is "spreading the knowledge", although they are working on a proposal to start career oriented program and finding employment for their students
- They had advertised for a software programmer, but couldn't find anyone
- Some of their instructors are graduates of U of J
- Their Internet café consists of 20 computers, and the link is 64kbps. The cost for the Internet link is about Rs. 75,000.00 per month, and they had spent Rs. 2 million (U.S.\$ 2000.00) in equipment for the link. The link is over satellite.
- They charge Rs.75.00 per hour for the internet cafe

#### **4.5 Jaffna Hindu College**

During my visit to the "Computer Unit" of the Jaffna Hindu College, I met Mr. S.Krishnakumar, Teacher in-charge, and Mr. M.Arulkumaran, Computer Lecturer of its computer unit. During our conversation there were others, including an A/L student, made some comments as well. Following are some observations and comments from the meeting:

- The "Computer Unit" contains about 26 PCs, and 6 out of them are out of order
- They have three P3 and the rest are P2 and P. All of them run Windows98
- They don't have any networks and all the PCs are standalone
- Sri Lanka Telecom provides a very unreliable ISDN connection to them
- They teach Word, Excel, and PowerPoint for grade 13 students
- For grade 12 students, they teach General Information Technology (GIT) which teaches the basic of computer and the names associated with it. It is much less than what they teach for grade 13. The GIT syllabus is from the Sri Lankan government.
- Starting from May 2003, they plan to teach Internet browsing which is part of GIT. They also will be teaching Visual Basic for beginners
- 30-40 students per class, and they conduct 8 classes per day. Each class meet twice a week
- Jaffna Hindu College and Hindu Ladies College teach for their own students. JHC teaches its teachers during weekends since they too need to know how to use the computer one day as things get computerized more and more. Jaffna Central College and Vembadi Girls College have computers, but they don't teach for their own students, but for outside students
- According to Mr.Krishnakumar, the shops in Jaffna should be computerized much like in India for their stocks, sales, billings etc. In India some shops maintain all the information and the purchase history for every customers. And there are shops like Seemati, VSP Groups etc. in Jaffna that could afford to do the same.
- If proper databases were created by an outside company, such as students' database, they would be buying them. They will somehow get the fund needed for

- such programs. Once they buy and start to use such database programs, other schools would follow suit
- They have a few text books on CDs, and while I was there I saw a student browsing a biology text CD
  - They give the instruction handouts in English language but the medium of instruction is Tamil
  - 98% of their O/L students get at least a passing grade in English, and about 50% get C
  - VanniTech will receive at least 4 times more applicants than it could enroll
  - the best students with the cutout score of about 275 (approximate average) go to the university, and the students with 260-275 go to National College of Education. And the “third stage education” is provided by the Advanced Technical Institute (ATI). The Technical College enrolls students with O/L and it provides employment-oriented education.
  - Students can’t afford to pay more than Rs.2000.00 or 3000.00 per month
  - Almost all the university students get some assistance such as the following:
    - o Mahapola – govt. – Rs.2800.00/month
    - o Bursary – univ. – Rs.1800.00/month
    - o Vice Chancellor fund – univ. – Rs.3000.00/month
  - An average family in Jaffna makes about Rs.5000.00/month
  - If vanniTech enrolls U of J unemployed graduates, they may drop out when they find a job
  - If the students’ age is between 21 and 25, then they will be very active, but the unemployed graduates will be above 28 and they may have other worries such as marriage, work, money, etc.

#### **4.6 Meetings in Colombo**

Mr. Jeyatheepan, Director of Finance of TITA, was kind enough to arrange a couple of meetings. The first meeting was with Dr. Ambalavanar, an advisor to the Prime Minister of Sri Lanka. The meeting took place at a personal level at his residence. Dr. V. Ambalavanar had received the vanniTech proposal some time back and read its contents. He too was enthusiastic about the project and mentioned that “what is needed right now is institute like vanniTech.”

Mr. Jeyatheepan, also arranged a meeting with some board members of TITA. The chairman, Mr. Ravi Shankar, Director Pradapeepan, and an advisor to the TITA board Mr. Nimalan Karthikeyan, a UNDP project manager also participated in the meeting. I had previously met Nimalan very briefly in Vanni.

Following are some notes from the meeting:

- The salary for the IT professional is in the range of Rs.15,000.00 - 40,000.00 per month. But about 65% of them get about Rs.15,000.00 - 25,000.00 per month
- There are about 100 software companies in Colombo. The largest company – virtusa, a U.S. based company employs more than 200 employees. The Millennium Information Technology (MIT) employs about 100 employees. They

- create software for domestic and foreign market. They created software for the domestic first and then sold it to Malaysia.
- A U.S. based company – EPICOR software Inc. do the software integration and customization work. Recently they got the award from the S.L Telecom for their billing contract worth U.S.180 million.
  - Suggestion came for collaboration with TITA, since ITTPO was an offshore entity.
  - TITA will open a computer-training center in Mullaitivu. The location was selected by the donor.
  - If some sort of scholarship or arrangement can be made for the instructors then it will be easy to hire them. The incentive can be a university admission in another country for the graduate program or an employment arrangement etc.
  - A press interview was suggested.
  - Vanni people are better and they are harder working than the Jaffna people. They will stay in Vanni or northeast and work. Unlike Jaffna people they don't have any relatives in Colombo or elsewhere.
  - Need to provide an English course that would teach only technical related stuff. Teach English and technology together.
  - Vanni people like computer, but don't like English. Their English is much below to Jaffna students.
  - VanniTech students should be given a tour of software companies in Colombo during their course work.
  - We need to come up with some sort of English-Tamil dictionary that contains the keywords that will be used in the class. There is an existing dictionary but that's not good
  - Getting 2 or 3 visiting instructors within the first 6 months is good
  - U of J computer science graduates don't have any industry exposure, they need to be trained if hired as lecturers
  - Image building is important if we want to hire or enroll the talents
  - Have solar based energy back-up
  - Have a quota system for admission, so that Vanni students will be able to get the admission, and then eventually the quota system can be eliminated as they improve their English.

Mr. Pradeepan is also a lecturer at the University of Moratuwa. Following are some notes:

- U of M provides Computer Science and Computer Engineering – the degree is “B.Sc. in Computer Science and Engineering.”
- Students need double math, physics, and Chemistry to get into the program
- 48 students are selected each year after their first year exams in the university
- 100% of their graduates are employed. They get their job even before they finish their studies. Companies come to the university to recruit future graduates. The companies who offer minimum salary of Rs.25,000.00 per month are allowed to recruit. Students are advised not to take the job for less money.

I had the opportunity to meet Mr. Thuraisingham Pradhbeeban in Colombo. He is a Software Engineer with John Keels Computer Services. There are more than 400

employees at John Keels Computer Services. He works in Sri Lanka as well as in Dubai. He is also ITTPO/VanniTech Discussion Group member. He will take charge for the courses related to the PDA (Palm O/S). He made several valuable suggestions and recommendations.

## **5 Conclusion and Recommendation**

The trip confirmed beyond any doubt that the need for VanniTech is real and the implementation of our proposed plan is essential without any delay. Everyone I talked with at every level was enthusiastic about the project and didn't have any doubt that vanniTech will succeed in its mission.

The immediate task is the funding of the Institute to function at a temporary location. The revised budget is U.S.\$99,700.00 for the first year of which \$82,800.00 is needed for the first 6 months. Although more funds can easily be utilized, realizing the short time we have for collecting such funds, the budget is adjusted to this amount.

VanniTech has found a temporary home in Killinochchi and concurrently we should also work toward achieving the goal of building a permanent structure for the institute within a year. We should work towards finding a gracious donor or donors for this task. We should explore foreign governments, non-governmental agencies, and philanthropists.

VanniTech should help other local computer training centers and the University of Jaffna where and when applicable. It should also teach English for its students and, if enough resources are available, for outside students as well. It should also focus to create some computer hardware technicians. It should create its own constitution. VanniTech should start as moderately equipped institution and not as minimally equipped as had been proposed earlier.

ITTPO can coordinate with the expatriates and other nationals to teach English to the local schools.

Since this is the first time such a unique project is being undertaken by the expatriate community, the expectation from the people is very high.

I am counting on all the ITTPO members for your support to collectively achieve our goal of setting up the institute, teaching the latest technology, creating employment opportunities and to plant the seed for the next era for the people of northeast of Sri Lanka.

I kindly hope you would participate wholeheartedly in this noble cause of feeding the population that has been cut off from the rest of the world for so many years, with some decent education and bring them out of poverty and misery.

The war is over and it's time to build and start helping the Tamils help themselves.

If we succeed in this journey, VanniTech will become as a symbol of our - the expatriates' existence.

I will be relocating to Vanni once the collection of fund is completed. I hope this can be accomplished before the end of December, so that I will be able to move by middle of January, and I intend to live there for a year while I run the VanniTech. VanniTech could be handed over to a board for continuous operation for years, or even centuries to come.

On a personal note, as I take this adventure on behalf of the expatriate community, I sincerely hope you wouldn't let me down when your assistances are needed. We expect help from each and every one of you since we are not that many! We expect active participation and contribution from all of you, and without that, VanniTech will not become a reality and stay as a pipe dream!!

## Appendix A

This is the temporary future home of the VanniTech. The second floor of the two-story building could make the classrooms and labs (first floor is not available). The one story building could house the offices.



Picture 1: Classrooms, labs and offices

Picture 2 is the view from the second floor. It shows the future offices on the left side, and behind is the 16-room hostel that could possibly accommodate 48 students. Guard's room is by the gate. The cafeteria is in picture 3.



Picture 2: Offices and Guard's room



Picture 3: Cafeteria

## Appendix B

Revised Budget

### VanniTech Projected Estimate 12-Nov-02

**CAPITOL COST** **First 6 Months** **Second 6 Months**  
U.S \$

Generator (30KV) 2xU.S. \$4500.00	\$9,000.00	
Air Conditioner 5KV (6xU.S. \$666)	\$4,000.00	
Vehicle (used vehicle)	\$7,000.00	
Furniture	\$4,000.00	
Computers (25xU.S.\$ 700.00)	\$17,500.00	
Laptop (2)	\$3,000.00	
Voltage Regulator		
UPS (25)	\$1,000.00	
Printer	\$500.00	
Overhead Video Projector (1)	\$2,000.00	
TV - (to be used in place of projector, day time)	\$500.00	
VCR, DVD	\$300.00	
Palm Pilots (3)	\$600.00	
Digital Video Camera (1)	\$1,000.00	
Digital Camera (1)	\$500.00	
Scope (1)	\$2,000.00	
Switch (1)	\$300.00	
Gateway (1)	\$500.00	
Router (1)	\$1,200.00	
Text Books	\$2,000.00	
Internet Connection	\$3,000.00	
Institute Facilities + Living Quarters (fix up)	\$2,000.00	
Microsoft SDK		
Palm Developers SDK		
Software packages -	\$1,000.00	
Misc.	\$1,000.00	
Shipping	\$2,000.00	
<b>Total Capital (minimally equipped)</b>	<b>\$65,900.00</b>	\$0.00
<b>RECURRING COST</b>		
Institute Facilities + Living Quarters	\$3,000.00	\$3,000.00
1 Watchman (\$50x6 months)	\$300.00	\$300.00
2 Helpers (2x\$50x6months)	\$600.00	\$600.00
1 Administrator (\$100x6months)	\$600.00	\$600.00
Instructors Salary (3x\$300 for 6 months)	\$5,400.00	\$5,400.00
Utility+ Misc. (6 months)	\$2,500.00	\$2,500.00

Internet Connection (\$750.00/month)	\$4,500.00	\$4,500.00
<b>Total Recurring Cost</b>	<b>\$16,900.00</b>	<b>\$16,900.00</b>
<b>Grand Total</b>	<b>\$82,800.00</b>	<b>\$16,900.00</b>
<b>Adjustments</b>		
<b>GRAND TOTAL FOR THE FIRST YEAR</b>	<b>\$99,700.00</b>	