

KIIFB NEWSLETTER

Vol 1. Issue 12.1



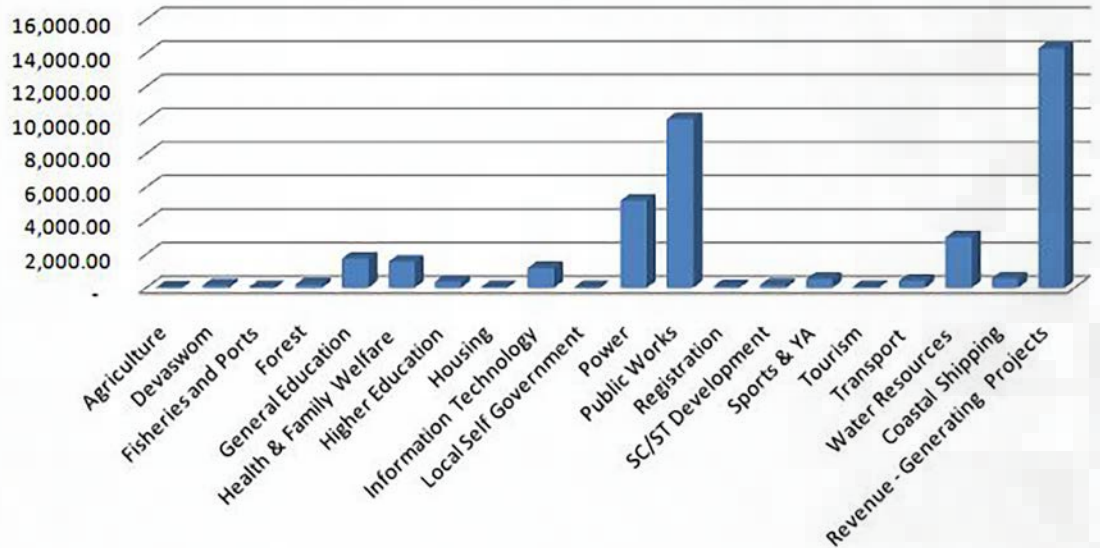
Defining the Future



Our Chairman
Shri. Pinarayi Vijayan
Hon. Chief Minister



Our Vice Chairman
Dr. T M Thomas Isaac
Hon. Minister for Finance



Approved Projects as on 28/11/2018



Smt. Anie Jula Thomas, Joint Fund Manager, KIIFB handing over the first series of Pravasi Chitty Bond Certificates to Smt. M. T. Sujatha, AGM NRI Business Centre, KSFE Ltd.

From the CEO's desk.....

The highlight of the last fortnight was the auction held for the online chits for NRIs on 23rd November 2018. In this issue, we would like to trace the journey that has led to this wonderful achievement.

The whole process was watched with eagerness and enthusiasm by our Honourable Minister Dr. Thomas Isaac in a press meet at Thiruvananthapuram. The Chairman, KSFE Shri. Peelipose Thomas and Sri. Purushothaman, Managing Director, KSFE were present with him along with several senior Board Members of KSFE. There was considerable excitement in the air. As our entire team watched with bated breath, Ajeesh of UAE made history and became the first auction winner in the lot.

This is the culmination of sustained efforts on the part of KSFE and KIIFB with the support of nearly one hundred IT professionals who have worked on the project to date, for the last eighteen months. Both KIIFB and KSFE and our entire team of IT professionals have every reason to be proud about this achievement. Many have contributed to this incredible accomplishment. The complexity of the project itself beats that of many of the IT projects ever done in Government or by a Government agency. What makes this unique is that, in addition to all the attendant design stipulations necessary for a financial instrument in terms of registration, KYC requirements, subscriptions there are additional requirements that makes the implementation challenging, some of which are listed below:

1. An online auction system, where the subscribers to a chit can enter a virtual auction room and participate in the auction.
2. Linking the KYC to the NORKA database to make sure that each participant is an NRI registered with the NORKA department.
3. Special features of Chits as a financial instrument with features like Proxy Subscription and Secret Bids

4. The technicalities involved to release a Chital number, should the client be unable to successfully effect the subscription in favour of another prospective client.
5. Registering the Chit with the live system of the Registration Department (CORAL)
6. Conversion of the money realized through chits into Bonds issued by KIIFB
7. A Financial Payment System for put options periodically from the Bonds issued by KIIFB so that KSFE can pay their commitments to Chit customers in time.
8. Integration of the subscription modules with systems of Exchange Houses
9. Online processing for different types of Securities

The design and implementation of the core system was done by National Informatics Centre by a team led by Shri. Ajith Brahmanandan and Smt. Zeena Shinto. There were four supporting partners of C-DIT who took care of each function: The Office and file flow management was done by Oस्पyn Technologies Pvt Ltd. The Mobile Application was developed by Saasvaap Techies Pvt. Ltd. The Customer Relation Management systems were developed by OrisysIndia Consultancy Services LLP. The accounting module as well as the module for the KSFE branches and Exchange Houses were developed by Insys Software Solutions.

From the KIIFB side, the project was managed by Shri. George Thomas, Additional Secretary and team, with Shri. Deepu Jacob Thomas, our Asst. General Manager (Institutional Finance) looking after the legal aspects. Our IT Consultant Sri. Syam K.B and his team played a vital role in bringing together the various systems, resolving process integration issues and at the same time assisted magnificently in the marketing activities in UAE and other Gulf countries.

C-DIT lead by its Registrar, Shri. G. Jayaraj and his team provided excellent support through the process.

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Projects Approved as on 28/11/2018

Department	Projects Approved by KIIFB	
	No. of Projects	Outlay Rs. in cr.
Agriculture	1	14.28
Devaswom	1	141.75
Fisheries & Ports	1	46.94
Forest	2	212.18
Gen. Edn. (Schools)	75	1745.91
Health & Family Welfare	13	1551.33
Higher Education	10	368.27
Housing	1	45.00
Information Technology	3	1174.13
LSGD	3	31.69
Power	8	5200.00
PWD - Roads	134	5755.51
PWD - Bridges	56	1566.52
PWD - ROBs	17	523.79
PWD - Flyovers	9	635.51
PWD - Hill Highways	17	1506.25
PWD - Coastal Highways	1	52.78
PWD - Underpass	1	27.59
Registration	6	89.88
SC / ST	10	167.76
Sports & Youth Affairs	27	528.91
Tourism	2	54.50
Transport	2	412.93
Water Resources	62	3012.64
Coastal Shipping & Inland Navigation	1	566.51
Industries (Revenue Return Projects)	3	14275.17
Total	466	39707.73

INDUSTRIES (Revenue Return Projects)

Development of Industrial Infrastructure - Land Acquisition	1	12710.00
Life Science Park Phase II - Trivandrum	1	301.17
Petrochemical & Pharma Park	1	1264.00
Total	3	14275.17

Sector Wise Project Status of Eranakulam District as on 28/11/2018

Department	Approved		Work tendered (including work started)		Work Started / Work Awarded		Under Appraisal	
	No. of Projects	Amount in Rs. cr.	No. of Projects	Amount in Rs. cr.	No. of Projects	Amount in Rs. cr.	No. of Projects	Amount in Rs. cr.
Coastal Shipping & Inland Navigation	1	566.51						
Fisheries & Ports	1	46.94						
General Education	6	119.85	5	104.85	5	104.85		
Health & Family Welfare	5	770.84	4	286.69	3	120.45		
Higher Education	4	276.65	2	105.59	1	74.23	1	13.58
Industries	1	1264.00						
Information Technology	1	251.13	1	84.22				
Power	3	735.99	3	629.51	2	519.42		
PWD - Bridges	3	152.52						
PWD - ROBs	3	183.16						
PWD - Flyovers	2	169.08	2	163.90	2	152.815		
PWD - Roads	10	935.95	4	101.94	3	64.19	3	181.10
PWD - Hill Highways							2	173.65
PWD - Coastal Highways							1	79.00
Registration	1	18.68						
SC / ST	1	10.00	1	9.01	2	7.22		
Water Resources	6	203.50	3	30.86	3	29.92	2	59.50
Total	48	5704.80	25	1516.57	21	1073.09	9	506.83

Sector Wise Project Status of Thrissur District as on 28/11/2018

Department	Approved		Work tendered (including work started)		Work Started / Work Awarded		Under Appraisal	
	No. of Projects	Amount in Rs. cr.	No. of Projects	Amount in Rs. cr.	No. of Projects	Amount in Rs. cr.	No. of Projects	Amount in Rs. cr.
Agriculture	1	14.28						
Fisheries & Ports	1	46.94						
Forest	1	112.18	1	83.6			1	188.11
General Education	7	132.47	6	114.47	6	114.47		
Higher Education	1	29.67	1	29.67			2	35.28
Power	4	472.24	3	236.98				
PWD - Bridges	8	117.24						
PWD - Hill Highways	1	80.57						
PWD - Roads	7	226.90	2	41.177			1	17.40
PWD - Coastal Highways							2	51.60
PWD - ROBs	4	112.18						
Registration	1	17.39						
Sports & Youth Affairs	2	65.59	2	59.74				
Water Resources	3	163.33						
Culture							1	11.18
Labour & Skill Development							1	29.18
Total	41	1590.98	15	565.497	6	114.47	8	332.75



പ്രവാസി ചിട്ടിയുടെ ആദ്യ ഓൺലൈൻ ലേലം 23 നവംബർ 2018 നടന്നതിന്റെ വിജയിയായ ശ്രീമാൻ അജീഷ് എൻ വർഗീസ് ആ തുക തീരദേശ പാതയുടെ നിർമ്മാണ പദ്ധതിയിൽ നിക്ഷേപിക്കാൻ താൽപര്യം പ്രകടിപ്പിച്ചു

Water Supply Schemes in Palakkad District

Through a large portfolio of water infrastructure projects, KIIFB is directly reaching out to millions of households in the state and contributing immensely in improving their living standards. These projects in Palakkad District form part of the Water Infrastructure portfolio of Kerala Infrastructure Investment Fund Board (KIIFB).

Considering the importance of the scheme and its impact on the life-quality of the people in Palakkad district, the 9th meeting of the Executive Committee held on 24th October 2018, chaired by Honourable Minister for Finance, approved seven (7) projects for a total estimated cost of Rs 243.24 crore. The projects are:

Comprehensive Drinking Water project in Elevencherry-Pallassana - Phase-1 (Rs.20.00 crore).

The areas benefited by the project are Pallasana, Elevenchery, Alathur, Erimayur, Puducode and Kavasseri. The population (base year 2020) benefited by the project would be 1,59,583. The existing facility is insufficient to cater to the present water demand of the population and the water supplied is of poor quality. The project will ensure supply of potable drinking water catering to an ultimate demand of 25 MLD. The project components include an Intake structure in Pothundi reservoir, Water Treatment Plant (WTP), Raw Water mains and pumps.



Comprehensive Drinking Water projects - Karimba and Kongad Panchayats Phase-1 (Rs.28.30 crore).

The areas benefited by the project are Karimba, Kongad and part of Mundur Gram Panchayats in Kongad and Malampuzha constituency. The population (base year 2020) benefited by the project would be 77,642. The existing system is insufficient to meet the present water demand. The project will ensure supply of potable drinking water to an ultimate demand of 12 MLD. The existing intake structure at Kanjirampuzha Dam will serve as the source. The components include Raw Water Pump House, 920 m long raw water main pipe from intake to WTP, WTP at Pulinchodu and overhead storage reservoir (OHSR) at Parakkal. Clear water pipe main (CWPM) is laid to proposed OHSR at Parakkal, existing OHSR at Edakurissi and existing OHSR at Kalladikode.



Vandazhi, Kizhakkancherry, Vadakkancherry & Kannambra, Comprehensive Fresh Water Distribution Project - Phase II (Rs. 69.54 cr.)

The areas benefited by the project are Wards except some elevated pockets of Vandazhi, Kizhakkencherry Vadakkencherry and Kannambra panchayaths. The population

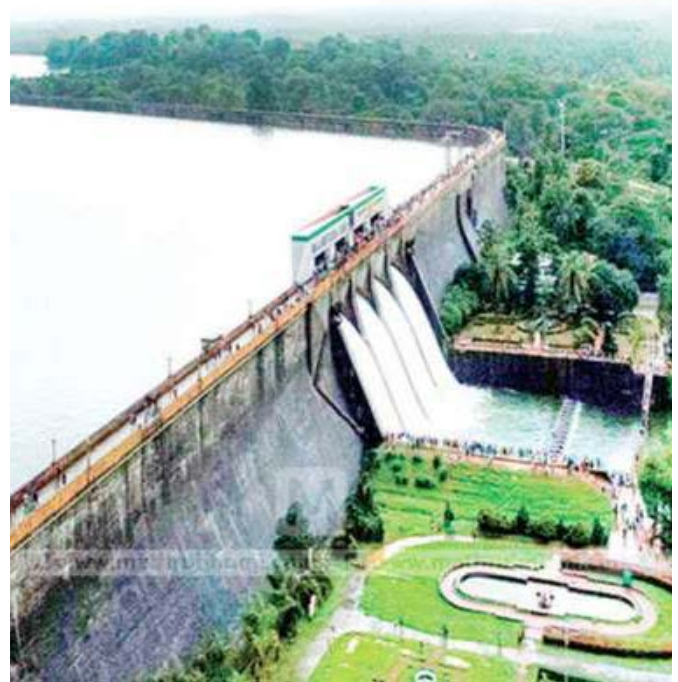
(base year 2017) benefited by the project would be 1,42,771. The project will ensure supply of potable drinking water to an ultimate demand of 17.14 MLD. The intake structure at Mangalam Dam being constructed in Phase 1 of the project will serve as the source. Raw Water Pumping Mains (RWPM), WTP, Master OHSR are under progress in Phase 1. The components in phase 2 include Raw Water Pump House, 20480 m long clear water gravity main pipe, 7475 m long clear water pumping main and 4 Nos OHSR at Ponkandam, Cheerakkuzhi Palam, Vadakkancherry and Kannambra



CWSS to resolve the scarcity of drinking water in various Grama panchayats in Malampuzha (Rs.64.14 crore).

The area benefitted by the project are Malampuzha, Akathethara, Puduppariyaram, Marutha road and Mundur Grama Panchayath. The total area of the project is 269.01 square kilometres with a population of 132450, as per 2011 census. The project will ensure supply of potable drinking water to an ultimate demand of 21.35 MLD. The existing Malampuzha dam will be the source for the project. The existing intake

and WTP at Malampuzha Dam will be utilised for the project. The components in the project include 55575m long clear water pumping main, 7 Nos OHSR at Marutharoad zone (2 Nos.), Pudupariyaram zone, Malampuzha Zone, Malampuzha high-level zone, Akathethara zone and Mundur Zone & 16 Nos of clear-water pump sets.



Jalagramam - Comprehensive WSS to Kozhinjampara, Vadakarapathy and Eruthempathy (Rs.23.82 crore).

The proposal deals with augmentation of existing scheme by the construction of new WTP as well as replacing old and damaged AC raw water pumping main & gravity main. The scheme is intended to provide water to meet the demand of Kozhinjampara, Vadakarapathy and Eruthempathy panchayats. The project is designed for an ultimate demand of 11.82 MLD. The existing Intake well at Chitturpuzha will serve as the source for the project. The Project components include 7.5 MLD WTP, clear water sump at Moonkilmada, 17060 m long clear water pumping main, 4415 m long clear water gravity main and 2 OHSR at Moonkilmada and Ozhalapathy.



Comprehensive WSS to Perumatty, Pattanchery, Elappully, Nallepilly - Phase-II (Rs.26.30 crore).

The project (Phase-II) is an augmentation of an existing scheme being executed as Phase-I).

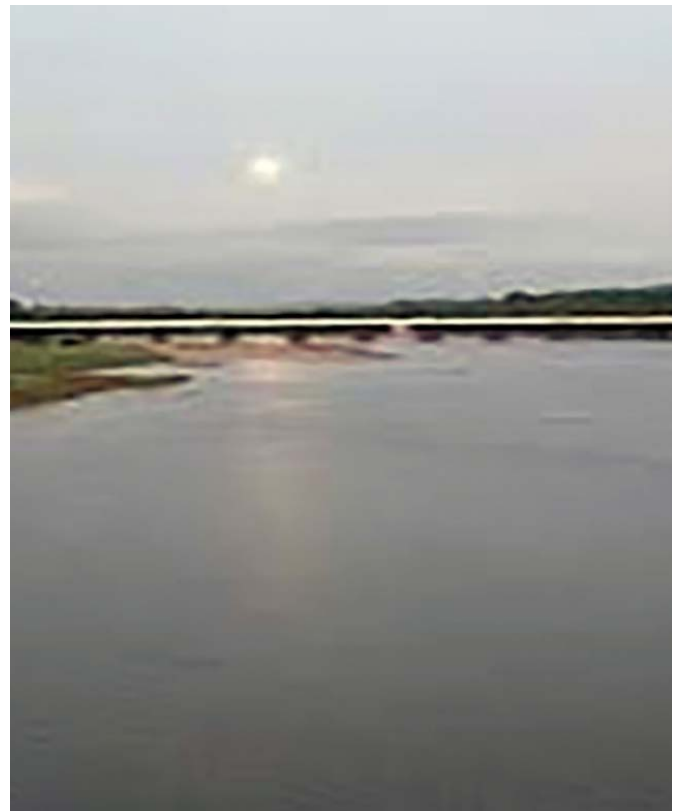
The Phase-II scheme intended to provide drinking water to entire wards of Pattanchery and Perumatty Gramapanchayath. The project is designed for an ultimate demand of 18.00 MLD. The existing Intake well at Chitturpuzha will serve as the source for the project. Intake well, Raw Water Pumping Main, WTP are in progress in Phase-I. The Phase-II Project components 10035 m long clear water pumping main, 13850 m long clear water gravity main and 4 OHSR at Chamiyarakalam, Nalepilly, Elapully and Kochikkadu.

WSS to Ambalappara Panchayath in Ottapalam taluk Phase-II (Rs. 11.14 crore)

The project (Phase-II) is an augmentation of an existing scheme being executed as Phase-I). The Phase-II scheme intended to provide drinking water to entire wards of Ambalappara Grama panchayath of Ottapalam Taluk. The present population of the scheme area as on

2011 is 38276 and the project is designed for an ultimate demand of 6.50 MLD. The ongoing Intake well under Phase at Bharathapuzha will serve as the source for the project. The Phase-II Project components are 0.5 MLD WTP at Palappuram, 6950 m long clear water pumping main, 52561 m distribution line.

Beside the above 7 projects, construction works are in full swing on 4 projects/schemes already approved by KIIFB, totalling Rs.91.5 crores. On completion, the projects will benefit Palakkad District, severely affected with water scarcity. The prevailing situation is that, many parts of the district covered under the above projects are reeling under acute drinking water crisis even during monsoon season and the drinking water quality standards are below par . The above projects tackle the issue on a long-term management basis and are designed accordingly. On ground, execution of works being implemented by Kerala Water Authority will commence soon after issue of Technical Sanction and Tendering.

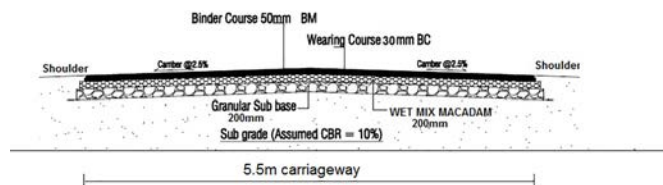


Design upgradation Case Study:

Project Name : Improvements to Thamarassery – Varattiakkal Road in Kozhikode Dist.

This project is designed for improving the riding quality and drainage facilities of the road from Thamarassery to Varattiakkal near Kunnamangalam which also acts as a bye pass for Kunnamangalam Town. The road is having two stretches the first road starts from Karadi, Thamarassery in NH-212 and ends on Kunnamangalam – Augustianmuzhi Road (MDR) at Varattiakkal and the second stretch is from Varttiakkal to CWRDM. Total length of the road is 17.775 Km. During the recent flood in Kerala this road was the major parallel road to the commuters from Kozhikode to Wayanad.

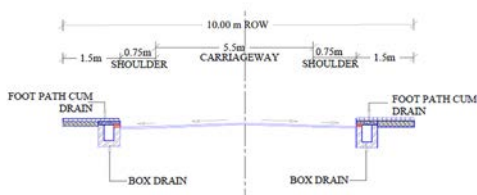
The project is sanctioned by KIIFB in Tranche -1 for an approved outlay of Rs 36 Cr. The estimate cost per Km for the project was Rs 1.95 Cr. This is not adequate to construct roads in KIIFB standards. The proposal submitted by KRFB was only for minimal improvements like 5.50m wide carriageway, which does not meet with KIIFB standard cross sections as specified in Guidelines for Planning and Design for Roads & Highway Projects. Public have also approached the MLA seeking development of this road into an upgraded one and offered free surrendering their land. SPV discussed this matter with KIIFB, and Inspection Authority (Technical) inspected the site on 12.10.18 and directed the SPV to consider the road to be upgraded to 10m RoW standard cross section by removing the encroachments as well as by taking the land by free surrender from the public.



The major demand from the local residents who were free surrendering their land for the road is to construct the compound wall after dismantling. This matter was taken in an in-house meeting in the KIIFB and decided to construct the compound wall for the land owners. The total cost of the free surrendered land has valued to be approximately Rs. 24.50 Cr and the approximate cost for construction of compound wall is Rs. 8.0 Cr. It was also decided to offer technical advisory support from the Technical Inspection wing of KIIFB to prepare detailed design for upgrading the project. The intervention from KIIFB is on the following aspects.

Functional design

In this context, the geometrical alignment and vertical profile will be modified in the most practically possible ways considering IRC standards for the same. The road is considered to be in the category of Major District Road and the design speed will be considered as 40 to 60 kmph and the curves will be redesigned to have minimum radius of 75 m. The vertical curves will be redesigned to satisfy the minimum Safe Stopping Distance and minimum Sight Distance for the design speed as per IRC 38. Since the



terrain of the road in the hilly terrain with cross slope more than 25%, gradient of the road will be limited to 7 % in the majority of the cases and 8 % in the exceptional cases. The drains on both sides will be adjusted to have a minimum slope of a 0.1% and joining with the nearby natural drains

Engineering Design

The pavement crest of the road will be redesigned as per IRC 37 considering the proposed traffic for a design period of 15 years and the overlay over the existing road will be designed as per IRC 81. The junctions will be proposed to be modified considering the maximum peak hour traffic in the junctions. The retaining walls will be limited to wherever it is unavoidable considering the cost reduction aspects. The foot path will be proposed in thickly inhabited areas over the drain and utility area by providing interlock paver blocks.

Inspection Authority (Technical) has also conducted the drone-based photogrammetric survey of proposed road and prepared the point cloud data of the same. Based on the drone output, surface of the road will be processed. This is the input data for the design. The chance of diverted traffic after the Construction from the parallel roads will also be considered for this.

The design CBR will be 8% and the material in Subgrade will be advised to be replaced with good material if the subgrade materials criteria is not as per MoRTH revision 5.

Construction Process

The Construction process was advised to be as per the following ways

- Shifting of utilities
- Checking of existing road parameters
- Mix designs of all major items like concrete, GSB, WMM, DBM, BC etc
- The Construction of cross drainage structures and side drains
- Construction of utility crossing
- Construction of widening area till the DBM layer
- Construction of profile corrective course and overlay over the existing road till DBM layer
- Construction of BC in a single layer
- Providing road furniture and construction of other finishing works

The new alignment and profile along with strip plan and other details will be provided to the SPV and the revised estimate shall be prepared by the SPV based on these drawings and submitted to TS for approval.



Inspection notes.....

The Administrative Inspection Wing (AIW) reviewed the Implementation process of the projects by three different Special Purpose Vehicles (SPVs) last fortnight viz. Kerala State Construction Corporation Ltd, Kerala Rapid Transit Corporation Ltd and Kerala Infrastructure and Technology for Education.

Kerala State Construction Corporation Ltd (KSCC)

The tender process & status of implementation of the following four sub projects under ST Development Departments implementing by the Kottayam Regional Office of KSCC Ltd were inspected by the AIW:

- i. Post Matric Hostel for boys at Kodalippara
- ii. New Hostel Building for boys for VTC at Nadukani
- iii. Construction of New Academic Block building for VTC Nadukani
- iv. Pre-Matric Hostel for Girls at Aruvilamchal at Udumbanchola

The project Pre-Matric Hostel for Girls at Aruvilamchal has been cancelled due to the non-availability of land. The Initial levels & interim levels have been taken and excavation work is progressing in the case of Post-Matric Hostel for Boys Kodalippar. Earth excavation works & borewell work are in progress for the Hostel Building for Boys, VTC Nadukani, as reported by the Regional Manager. Initial steps have been taken for demolishing of the existing quarters in the site of Academic Block Nadukani as reported but the contractor has requested to terminate the agreement as the site was not handed over after clearing. These works have been delayed mainly because of the reason that the works were awarded before clearing and handing over the sites.

Kerala Rapid Transit Corporation Ltd (KRTL).

The three sub projects entrusted to KRTL are the Flyovers at Sreekaryam, Ulloor and Pattom

in Thiruvananthapuram District. The acquisition of Land is the critical activity and accounts for the lion share of the project cost. Though KIIFB has approved the sub projects on 08.05.2017, not much progress has been achieved in terms of physical commencement of the projects. In the case of Flyover at Sreekaryam, Social Impact Assessment (SIA) and demarcation of land by planting the alignment stones have been completed. The notification for Land Acquisition by District Collector is expected soon. Preliminary demarcation of land has been completed by the SPV and Social Impact Assessment is in progress in the case of Flyover at Ulloor. The Design & Cost was later changed for the Flyover at Pattom (extended up to Plamood) and therefore revised DPR has to be prepared. The LA requisition has been submitted to the District Collector. Since the implementation of Projects have been delayed, KIIFB will review the projects periodically.

Kerala Infrastructure and Technology for Education (KITE).

Inspections in the HS/HSS/VHS Sections of a few Schools in Thiruvananthapuram (8), Ernakulam (1) Kollam (2) and Kottayam (8) districts were conducted during the last fortnight to verify the installation status of the ICT equipment supplied to the Schools under the project "Hi-Tech School Programme". An opinion survey among the students and PTA has also been conducted to evaluate the success of the project by supplying a questionnaire to them. The students and teachers are satisfied with the facilities provided under the project and the equipment installed are well maintained except in some locations. The ICT enabled curriculum and teachings for HS Section are found to be adequate as per the response from the students and teachers while the students at HSS/VHS sections have complaints about the insufficiency of teaching content in the "Samagra" portal. These will be brought to the attention of the Secretary of the General Education Department.

Continued from page 2

On the KSFE side, we had the pleasure of working with a committed group led by Sri. Selvaraj and Smt. Sujatha, Asst. General Managers with Sri. Padmakumar, Senior Manager, Sri. Shaji and their extraordinarily dedicated team.

To integrate the whole efforts into the IT system of the Registration Department, a team of NIC led by Shri. K.V. Jayakumar helped us with this. To link our systems to salaries of employees as a mode of security for the chits, Shri. G. Jayakumar and his team made the necessary modules in SPARK.

The Taxes Department and the Registration Department were immensely supportive through the process. The NORKA team led by Shri. Harikrishnan Namboothiri facilitated the NRI data integration.

Looking back, one can only say that all such efforts can succeed where there is a team with each member playing his or her role with dedication and passion.

It is to this teamwork that we humbly dedicate this issue.

More in our next edition

Chief Executive Officer, KIIFB

KIIFB PRAVASI CHITTY BONDS ISSUED

Kerala Infrastructure Investment Fund Board (KIIFB) issued its exclusive Pravasi Chitty Bonds to the Kerala State Financial Enterprises (KSFE) On 22nd November 2018. Three Series of Bonds namely KIIFB-KSFE-CS-NOV2018-SERIES -1 to 3 which worth Rs.77.20 lakh were issued on that occasion. This week the second set of Bonds Series-4 to 6 worth Rs.126.90 lakh were issued on 29th November, bringing the total issuance to Rs. 2.041 crore.

The concept of Pravasi Chitty linked to infrastructure development in the state was envisaged through the Budget speech 2016-17. The idea was to provide a social security based savings scheme for the expatriate community while ensuring their indirect participation in the development of the State. In this regard the Boards of KSFE Ltd and KIIFB jointly started the process of setting up the scheme. Bringing in the complex processes and procedures in normal chitty was really a challenging task. The process flow and hence the software had to be modified frequently to best suit the scheme and to make it a user-friendly product. Lot of technical and legal thought and effort has been put in to make the Online Chit product a reality. Enrolment to Pravasi

chit was started in the month of October this year and registration opened for GCC countries. The first auction of the 3 Chits announced was held on 23rd November.

In this way KIIFB will be issuing different category of Bonds namely Security Bonds, Deposit Bonds and Corporate papers etc. depending on the investment type opted by KSFE. The first instalment to be retained as security by KSFE will be deposited as Security Bonds with KIIFB. These will be of 5 to 10-year tenure with a put option which would be exercisable after the tenure of the chit. The money deposited with KSFE by prized subscribers will be placed as Deposit Bonds with KIIFB with a put option exercisable after the tenure of the chit. Prized Subscriber/KSFE would also be given redemption option during the tenure of the chit subject to accepting a reduced payment. KIIFB is also considering to offer 30-day tenure Commercial Papers against the monthly pay outs as prize and dividend. KIIFB expects this source of fund as the cheapest of all its external sources. The Pravasi Keralite can also be proud of contributing to the state's development while securing their own future through the several benefits attached to the Pravasi Chitty.