

Initial Environment Examination (IEE) report for Retrofit of Government Working Women's Hostels at Villupuram

Final Report (Strictly confidential for controlled circulation)

Date: 5th May 2021

Submitted by,



Emergent Ventures India Pvt Ltd

Magnum Tower 1, 8th Floor, Golf Course Extension Road, Sector-58, Gurgaon Haryana, India – 122001



Table of Contents

1.	Project overview4		
2.	Existing Environment		
2	.1.	Physical Environment	
	a)	Topography8	
	b)	Meteorology and Climate8	
	C)	Hydrology and drainage	
	d)	Water supply and sanitation9	
	e)	Air Quality & Noise	
2	.2.	Biological Environment	
	a)	Forest and Land Use9	
	b)	Flora and Fauna9	
2	.3.	Socio Economic & Cultural Environment9	
3.	Pot	ential Environmental Impacts and Mitigation Measures10	
4.	Analysis of Alternatives12		
5.	Institutional Arrangements13		
6.	Environmental Monitoring & Management Plan (EMP)13		
7.	Public Consultation & Disclosure Mechanism13		
8.	Grievance Redressal Mechanism13		
9.	Conclusion & Recommendations14		
10.	Annexures14		
А	Annexure 1: Documents received and reviewed14		
А	Annexure 2: Site Photographs16		



Disclaimer

This report contains information that is confidential and proprietary to Tamil Nadu Infrastructure Fund Management Corporation Ltd. (TNIFMC) and may not be reproduced in whole or in part, nor may any of its contents be divulged to any third party without the prior written consent of TNIFMC. This report includes information obtained by EVI from TNIFMC and Tamil Nadu Working Women's Hostels Corporation Limited (TNWWHCL) considered to be reliable. EVI and its respective affiliates, officers, employees, agents and consultants make no representation or warranty as to the accuracy or completeness of the contents of this report, and take no responsibility for any loss or damage suffered as a result of any omission, inadequacy or inaccuracy herein. EVI makes no representation or warranty as to the accuracy of such statements or assumptions.

This report contains both historical and analytical information to the best knowledge of EVI. In particular performance or results or achievements are subject to known and unknown risks, uncertainties and contingencies, and which may cause actual performance, results or achievements to differ materially from those which are anticipated. Factors which may affect such statements include, among other things, overall political, economic and business conditions, pricing and other competitive factors in the focus sectors changes in regulations etc.

This report is only intended for distribution to TNIFMC. The transmission of this report without the written consent of TNIFMC to any person other than the stated recipient is unauthorised and may contravene regulatory requirements of relevant authorities.



1.PROJECT OVERVIEW

The Tamil Nadu Infrastructure Fund Management Corporation Limited (TNIFMC), is an Asset Management Company (AMC) promoted by the Government of Tamil Nadu (GoTN) for the purpose of raising and managing alternative asset funds focused on sectors like infrastructure, affordable housing etc. TNIFMC is currently managing two Alternative Investment Funds (AIF), viz., Tamil Nadu Infrastructure Fund (TNIF) and Tamil Nadu Shelter Fund (TNSF). Tamil Nadu Shelter Fund (TNSF) is registered as a Category I (Social Venture) Alternative Investment Fund, with a mandate to invest in affordable housing in Tamil Nadu. TNSF invests in affordable housing projects in the private, PPP or Government and/or its agencies. The primary focus of TNSF is:

- Affordable housing housing for the economically weaker (EWS) and low-income groups (LIG),
- Hostels for working women from all sections of the society
- Industrial accommodation for workers in SIPCOT Industrial Complexes/ Parks
- Senior and assisted living

Tamil Nadu Working Women's Hostels Corporation Limited (TNWWHCL) is a Special Purpose Vehicle (SPV) established in 2019 and incorporated on 6th February 2020 as per Companies Act 2013 by Department of Social Welfare and Nutritious Meal Programme under Government of Tamil Nadu in order to handle the social infrastructure projects in the state such as Working Women's Hostel, Senior Citizen Homes, Inclusive Living, etc. Owing to the huge demand for safe and affordable accommodation for working women, the TNWWHCL has initiated the process of retrofitting existing Working Women Hostel so as to provide affordable accommodation and protection to working women. TNSF is planning to invest in TNWWHCL for the retrofitting of existing Working Women Hostel at eight locations (Salem, Tiruppur, Perambalur, Villupuram, Vellore, Tirunelveli, Thanjavur and Chennai)

This Initial Environment Examination (IEE) report is for the proposed retrofit of working women hostel in Villupuram. The description of proposed site is provided in table below:

Parameters	Description
Project details	The project aims to retrofit the existing hostel for working women and girls in Villupuram, Tamil Nadu. The hostel will be retrofitted with environmentally friendly interventions suited to the needs of the occupants.
Location	The hostel is located in Vaidretti, Villupuram. Latitude: 11°55'47.96"N, Longitude: 79°28'24.61"E

Table 1. Description of proposed site



Total area	Total land area of the site is 1246 Sq.m $$ and build up area is 663.50 Sq.m $$	
Present and Past land use	The site is presently being utilized as a Government Welfare hostel for working women.	
Adjoining area	The hostel is in an established residential area. Numerous industries falling within a radius of 5 kms	
Access road	The locality is accessible via NH 332, NH 38 and SH 69	
Building	Own building Structure (number of floors) – Ground + 1 floor Number of Rooms - 20	
Operational Since	2017	
Present Strength (as on 15.10.20)	Total 20 Rooms with 42 Beds. The hostel is currently 78% occupied (33 beds) • 4-seater - 1 rooms, • 2-seater - 19 rooms.	
Present Staff Details	OA-1(Govt.), Night watchman -1, Sweeper-1	





Figure 1. Location of project site on google earth

The feasibility report prepared by Cushman and Wakefield details out the present status of the Villupuram Working Women Hostel, requirements of retrofitting and proposed enhancements.

The retrofitting plan is proposed for the all the hostel floors. As per the plan, a covered parking for two wheelers will be built in the hostel premise. A security cabin will also be provided with a toilet. A separate laundry area will also be provided. The layout of the 2 bedded rooms and 4 bedded rooms will be retrofitted to include foldable study units. Additional storage will be provided in 4 bedded rooms.

Fire extinguisher is present but is expired hence garbage bins and fire extinguisher will be provided as part of the retrofitting process

The summary of proposed retrofitting is mentioned in the table below:

Table 2. Summary of proposed retrofitting

S. No	Proposed Retrofitting		
Site Level Retrofitting			
1 2-Wheeler parking with GI sheet roofing			



2	Facade treatment with standardisation scheme		
3	Security room with attached toilet		
4	Laundry area		
For Existing	For Existing 2 Bedded Room		
5	Wardrobe shutters		
6	Foldable study unit		
For Existing 4 Bedded Room			
7	Wardrobe shutters		
8	Foldable study unit		
9	Additional Storage		

This is Initial Environment Examination (IEE) report is prepared as per the requirement of ADB's Safeguard Policy Statement. The information collection for preparation of this report includes collection of secondary information, site observation by EVI team, meetings with TNIFMC, TNWWHCL, Department of Social Welfare, Government of Tamil Nadu and District Social Welfare Officer, Villupuram.



2. EXISTING ENVIRONMENT

2.1. Physical Environment

a) Topography

The project site is situated in Vaidretti in Villupuram district. The district has a total geographical area of 7,194 Sq.km¹ and is located in north of Tamil Nadu, at a distance of about 100 kms² from north Chennai border. The district shares its boundaries with Tiruvannamalai and Kanchipuram in North²; Cuddalore and Kallakurichi in South²; Dharmapuri and Salem in west²; Puducherry and Bay of Bengal in the east².

The district has Kalrayan Hills³ forest park and Gingee Hills³ forest at distance of 116 km west³ and 50 km north³ of the district. The district is characterized by hilly terrains in the west⁴, plain terrain in the middle⁴ and coastal plains in the east⁴ and is mainly utilized for agricultural⁴. The soil is mainly red, sandy and black cotton². The hilly areas have trees of teakwood, sandalwood, rose wood etc.²

The project site is located at 11°55'47.96"N and 79°28'24.61"E. The site is accessible via NH 332, NH 38 and SH 69. The project site is in an established residential area with numerous industries falling within a radius of 5 Km.

b) Meteorology and Climate

The average rainfall² in the district is around 1060.3 mm. The average rainfall during winters² and summers² is 4.96 mm & 139.56 mm respectively and is the highest², 677.54 mm, during the north east monsoon.

Villupuram has a humid climate and moderate temperature which varies from 30°C to 41°C². During summers the temperature reaches 40 °C² and during winters it swings between 30 °C and 35 °C².

c) Hydrology and drainage

The Ponnaiyar, the Malattar and the Gadilam are the major rivers flowing through the district². Other rivers which form a part of the district are Manimukta nadi; Pambaiyar; Varaganadhi also known as Gingee River². There are also small reservoirs Gomukha, Vedur and Mahanathur²

¹<u>https://www.censusindia.gov.in/2011census/dchb/3306_PART_B_DCHB_VILUPPURAM.pdf</u>

https://cdn.s3waas.gov.in/s3e44fea3bec53bcea3b7513ccef5857ac/uploads/2020/03/2020031785.pdf ³http://www.environmentclearance.nic.in/writereaddata/District/surveyreport/280820184ZPRM9OHDS <u>R.pdf</u>

⁴ <u>https://www.twadboard.tn.gov.in/content/villupuram</u>



across rivers. All the rivers are ephemeral. The district has a low drainage density² with a parallel to sub parallel drainage system.

d) Water supply and sanitation

The water for the project site is sourced from the Borewell.

As per Central Ground Water Board (CGWB), the net groundwater availability in the district is 1498.28 MCM⁴ and the district is categorized as overexploited.

e) Air Quality & Noise

Air pollution level in Villupuram is satisfactory with an air quality index⁵ of 65 as on 13th April 2021.

2.2. Biological Environment

a) Forest and Land Use

The project land is currently utilized as a welfare hostel for working women and girls. It is located amidst a residential area with housing settlements located at a considerable distance. There is no established forest cover however; the site has overgrown bushes and shrubs. There are urban green spaces nearby the site.

b) Flora and Fauna

The project site has overgrown bushes and shrubs in its premise. Based on the biodiversity screening of the area using IBAT (Integrated Biodiversity Assessment Tool) no rare, endangered and threatened species were found in the project area.

2.3. Socio Economic & Cultural Environment

The project site is situated in Vaidretti in Villupuram district which has a total of 800,368¹ households. The district has the 6th highest¹ population in the state with a total population of 3,458,873¹ out of which 1,740,819¹ are males and 1,718,054¹ are females. The population of children (age 0-6) is 404,106¹ out of which 208,246¹ are males and 195,860¹ are females. The sex ratio of the district is 987¹ which is lower as compared to the state average of 996¹. Child sex ratio of the district is 941¹ lower than Tamil Nadu average of 943¹.

The literacy rate of the district is $71.9\%^1$ which is lower than the State literacy rate of $80.1\%^1$. The male literacy rate is $80.55\%^1$ whereas the female literacy rate is $63.15\%^1$. The Scheduled Caste (SC) is $29.37\%^1$ whereas the Scheduled Tribe (ST) is $2.16\%^1$ of the total population in the district.

The hospitals are at a distance of 3.3-3.9 km from the project site. There are educational institutions at a distance of 0.5-2.9 km from the site. The bus stop is within distance of 1.6 km

⁵ <u>https://airpollutionapi.com/aqi/india/tamil-nadu/villupuram</u>



from the site. The railway station and the Puducherry airport are at 4.3 km and 44.3 km respectively from the site.

There are no cultural or heritage site present in and around the land.

3. POTENTIAL ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

The proposed retrofitting requirements include minor changes in the furniture, painting and layout of the hostel. It doesn't involve the structural changes i.e. no civil construction is anticipated in the project implementation. Based on the ESG due diligence study conducted by EVI, there were no major environmental and social risks identified in the retrofitting project implementation. Few minor risks were identified and the proposed mitigation plan against them is motioned in the table below:

S. NO	Material Risk	Related Key findings	Mitigation action plan
1	Consumption of water	Records of consumption of water are not maintained.	A monitoring mechanism shall be developed to record the daily and monthly consumption of water. The hostel staff i.e. security guard may be assigned this responsibility. Water meter may be installed to monitor and record the ground water withdrawal.
2	Health, Safety and security	 The security guard is not available during daytime. Scope of retrofitting includes installation of security cameras and fire extinguishers which will enhance safety and security. 	A 24/7 security guard should be appointed for the hostel premises



Sustainable
Solutions
for the
Planet
rianee

3	Corporate level governance policies	As TNWWHCL is in early stage the corporate policies i.e. prevention of sexual harassment, anti- bribery & corruption etc. have not been developed so far. However, the company is owned and operated by Government of Tamil Nadu, the government regulation and guidelines shall be applicable	As TNWWHCL is a Government owned company registered under company act 2013, it would be good to have company's corporate policies on following: Prevention of sexual harassment Anti-bribery and corruption, Child labor and Forced labor Whistle- blower Environment health and safety policies
4	Grievance Redressal Mechanism	At present grievance redressal is done through District Social Welfare Officer (DSWO). Evidence of documented records of grievances is not available. Grievance redressal system for the company needs to be put in place before start of retrofitting of hostels. However, GRM of TNIFMC as a Fund Manager will be in effect. This further requires company to appoint field level GRO. GRM guidelines should be displayed and communicated to women staying in hostel.	A Grievance Redressal Mechanism (GRM) may be put in place with clear process of grievance receiving, documenting, closure and contact details of GRO

5	Monitoring and Reporting	At present Monitoring and reporting of hostel is through DSWO. A periodic monitoring and reporting system specific to company as well as project sites needs to be prepared before start of retrofitting of hostels.	A periodic inspection or monitoring mechanism may be developed. The mechanism can include the key ESG risk i.e. floods, GRM, Contractor management etc. inspection/audit template for each ESG risk shall be prepared.
6	Contractor management	Contractor for retrofitting work will be appointed through tender process. Guidelines of the Government of Tamil Nadu (Tamil Nadu Tender Transparency Act) will be followed to the extent applicable	Company may ensure that site specific ESG aspects are integrated in tender and contractor's agreement. This should include monitoring and reporting system, system to ensure non ethical practices, anti- bribery and anti-corruption measures, guidelines for prevention of sexual harassment, system to handle grievances of contractor, ensuring presence of designated officer at the time of retrofitting done by workmen

4. ANALYSIS OF ALTERNATIVES

As the proposed project is to retrofit the existing government working women hostel in Villupuram, the alternative analysis is not applicable. Moreover, the proposed retrofitting activities have minimal or no impact on environment and social aspect. It can be concluded that the proposed retrofitting options are the best suited environment and social friendly options hence alternative analysis is not required.

12 of 18

Sustainable Solutions for the Planet



5.INSTITUTIONAL ARRANGEMENTS

Project is being developed by Tamil Nadu Working Women's Hostels Corporation Limited (TNWWHCL), a SPV established by the Department of Social Welfare and Nutritious Meal Programme (DSW) under Government of Tamil Nadu. TNWWHCL was incorporated on 6th February 2020 as per Companies Act 2013. The purpose of the SPV is to oversee construction, maintenance and operations of selected Government Hostels. The Chairperson and Directors of the company are from Government Departments. TNWWHCL shall be the key institution with the responsibility to implement the Environment and Social recommendations at the site

6. Environmental Monitoring & Management Plan (EMP)

As the proposed retrofitting project has no major environmental and social impact, a separate environmental monitoring and management plan is not required. There are few minor impacts can be easily manageable with the suggested mitigation actions. However, due care will be taken to follow 'Good Engineering Practices' to ensure least pollution (air, noise, etc.) during the retrofit works. Company may develop guidelines for the contractor to ensure good engineering practices. Some onetime changes in the governance structure of the TNWWHCL have been suggested for the implementation of mitigation plan.

7. PUBLIC CONSULTATION & DISCLOSURE MECHANISM

As the proposed retrofitting project involve only cosmetic changes in the layout of the hostel and the rooms. There are no structural changes suggested as part of retrofitting hence no additional construction activity shall take place. The complete project implementation shall be done with the hostel premises. Hence, this proposed retrofitting project doesn't warrant public consultation. Regarding disclosure mechanism, there is a provision of notice board to share the information regarding the retrofitting project with the residents.

8. GRIEVANCE REDRESSAL MECHANISM

As the overall responsibility lies with Department of Social Welfare, Government of Tamil Nadu, the grievance redressal is done through District Social Welfare Officer (DSWO). However, evidence of documented records of grievances is not available. GRM of TNIFMC as a Fund Manager will be in effect. This further requires company to appoint field level GRO. It is suggested in the mitigation plan that TNWWHCL may develop a company level Grievance Redressal Mechanism detailing out the process of grievance receiving, addressing,



documenting and closure along with contact details of GRO. The GRM guidelines should be communicated to women staying in hostel.

9. CONCLUSION & RECOMMENDATIONS

This Initial Environment Examination (IEE) study reveals that there are no major environmental and social impacts of the proposed retrofitting project. There are few minor possible impacts, but these are very much understood and manageable i.e. Impacts can be completely avoided, or minimized. The proposed project site is not located in environmentally or culturally sensitive areas. The hostel complex is Government owned so no further land acquisition is anticipated; hence no physical and/or economic displacement of people shall be required for project implementation.

Based on the findings of the IEE, the classification of the project as **Category C** is confirmed i.e. it is likely to have minimal or no adverse environmental impacts. Hence no further special study or detailed EIA needs to be undertaken to comply with ADB SPS (2009).

10. ANNEXURES

Annexure 1: Documents received and reviewed

- 1. Detailed feasibility report
- 2. TNWWHCL Certificate of Incorporation



- 3. GO's stating TNWWHCL Under SPV- formation
- 4. GST Certificate TNWWHCL



Annexure 2: Site Photographs





Adjoining area



Access road

Staircase



Terrace





Sustainable Solutions for the Planet







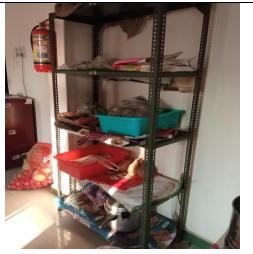
Kitchen



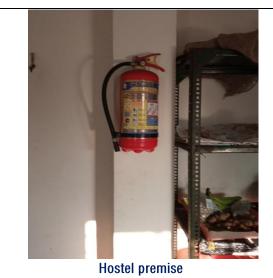
Kitchen



Hostel premise



Storage





Hostel premise



Sustainable Solutions for the Planet

