

# **GARBAGE WASTE MANAGEMENT PLAN OF VILLAGE PANCHAYAT HARVALEM, BICHOLIM -GOA.**

**2020-21**



## **INTRODUCTION:**

*Goa, India's smallest State, is nestled between the Western Ghats and the Arabian Sea. Variously known as "Pearl of the Orient" and a "Tourist Paradise", the state of Goa is located on the western coast of India in the coastal belt known as Konkan. The magnificent scenic beauty and the architectural splendours of its temples, churches and old houses have made Goa a firm favorite with travellers around the world. It was liberated from the rule of Portuguese in 1961 and is considered as the 25th State in the Union of States of India. On 30 May 1987, it became a separate state.*

*Having been the meeting point of races, religions and cultures of East and West over the centuries, Goa has a multi-hued and distinctive lifestyle quite different from the rest of India. Demographically too Goa is different with the rural urban divide being very thin. The lifestyle, standard of living and consumption patterns are quite urban even in some of the remotest corners of the State*

*Both the above factors have slowly given rise to the problem of Solid Waste. Urbanization and changing lifestyles are steadily increasing the quantities and composition of solid waste being generated in the state. Today, with changing lifestyles, there is a huge demand for packaged products. The production and consumption of such products is having a significant impact on the environment with increasing amounts of plastic, paper, cardboard etc. being generated and disposed irresponsibly.*

*Estimates suggest that across the whole state, including the villages, the waste generated could be in the range of 400 tonnes per day. Considering an average 50% of this waste is non-biodegradable, we are looking at almost 200 tonnes of non-biodegradable waste with enormous recycling potential.*

*With respect to the legislation governing municipal solid waste management, in addition to the national Municipal Solid Waste (Management and Handling) Rules, 2000, the Goa Non-Biodegradable Garbage (Control) Act, 1996, and Rules of 1997 also provides a framework to collect, manage, treat and dispose of biodegradable as well as non-biodegradable waste in a scientific and eco-friendly manner in the state of Goa. Despite this legal framework, the situation on the ground is not encouraging and the problem of waste still remains a massive challenge to be addressed.*

*Growing solid waste generation in tourist regions along with poor waste collection efficiency rates and inefficient transportation and disposal facilities is compounding this problem further, especially in Goa's coastal villages. A handful of villages have been able to start some waste management initiatives. But, by and large, most municipal bodies and villages in Goa are struggling to manage their waste effectively and have a lot to do in this regard.*

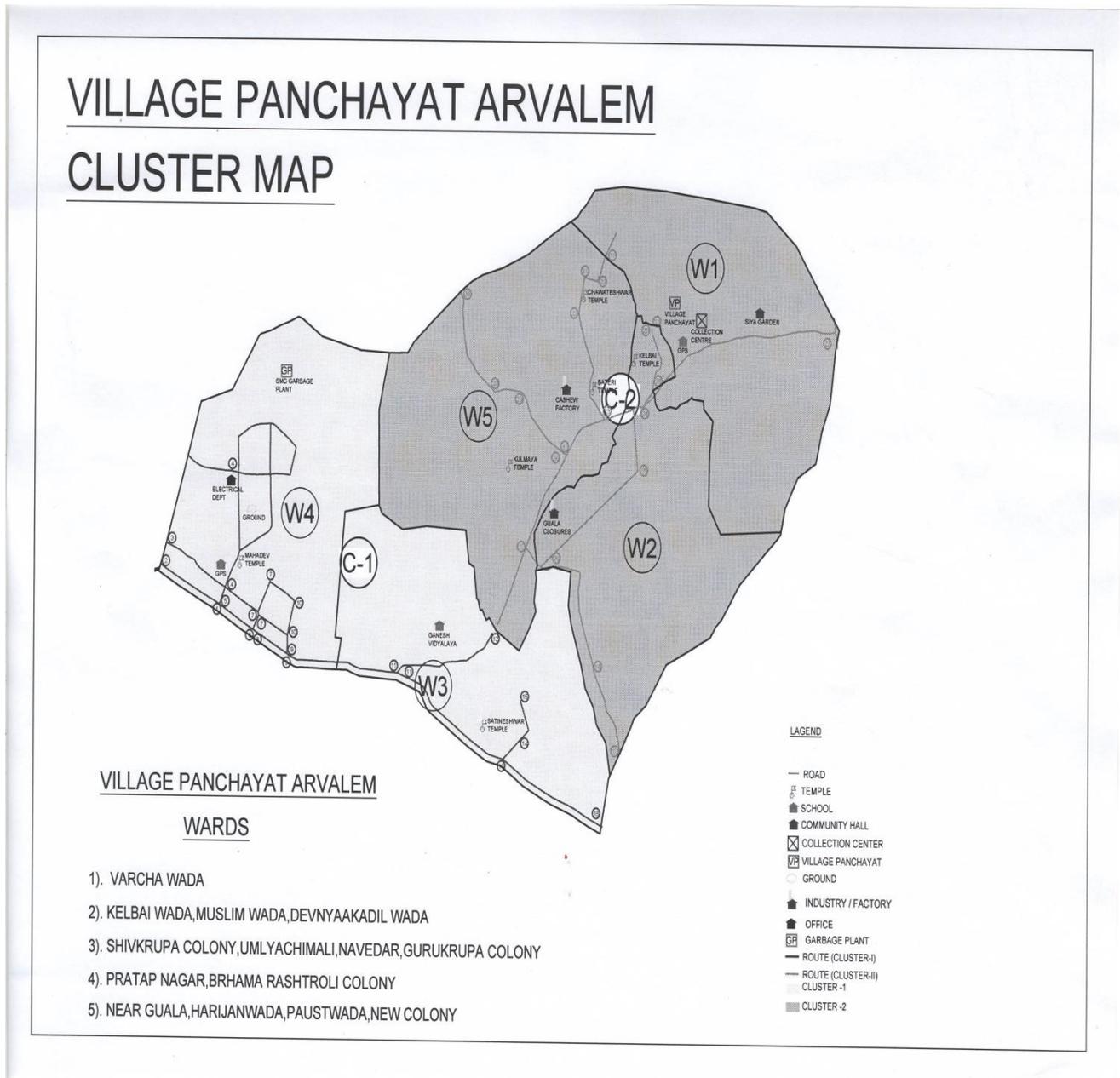
*These problems will only continue to grow with the rising population - both residential and floating - pushing up the waste generation figures in the years to come.*

*To enable and facilitate proper waste handling and processing, the Govt. of Goa started the Solid Waste Management Cell under the Department of Science, Technology & Environment. The SWM Cell was mandated to support the local bodies to effectively manage their waste at source and also provided support for effective disposal. The Dry Waste Collection Scheme of the Govt. was a means towards this end that provided infrastructural and financial support to Panchayats for door-to-door collection, primary storage, secondary collection and proper disposal of the collected dry waste.*

*With the success that the SWM Cell achieved, consequently, realizing the need for scaling up the efforts, the Govt. constituted the Goa Waste Management Corporation (GWMC), an autonomous body to address all facets of waste management in the State of Goa. The GWMC is housed at the Hindustan Waste Treatment Plant at Saligao and has a fulltime Managing Director along with a team of technical personnel that provide support to the local bodies in the State.*

*In order to further streamline the efforts of the GWMC and get people's participation on Board, the Corporation has decided to initiate the formation of Waste Management Plans for all the 189 Panchayats in the State. As a pilot 15 Panchayats have been chosen with one co-ordinator appointed from various organizations and individuals working in the sphere of waste management in the State.*

*For the Village Panchayat of Harvalem in Bicholim Taluka, Smt.Lakshanti Bandekar and Mr. Shravin Korgaonkar from the Mineral Foundation of Goa have been identified as the Co-ordinators.*

WARD WISE SCHEDULE MAP FOR THE COLLECTION OF DRY WASTE**ABOUT HARVALEM VILLAGE**

*Harvaalem is a village situated in Bicholim taluka in the North Goa District. It is situated 9km away from sub-district headquarter Bicholim and 35km away from district headquarter and capital city of Panaji. The total geographical area of the village is 505.00.75 hectares. Agriculture and Industry related activities are the primary sources of livelihood for the people of Harvaalem. Harvaalem has a total population of 2608(2011) census with 833 households, 5 commercial shop.*

*The village has 5 wards as per the electoral division. The ward details along with the elected representative and his/her designation is provided in Table 1*

**Table 1: Ward details of V.P. Harvalem**

<b>Sr. No.</b>	<b>Elected Representative</b>	<b>Designation</b>	<b>Ward No</b>	<b>Wadas</b>	<b>Number of house holds</b>	<b>Remark</b>
1	Shri. Nandini Nandu Gawas	V.P. Dy.sarpanch	I	Upper Harvalem	208	Residential
2	Shri.Raju Fatko Malik	V.P panch	II	Madhalawada	126	Residential
3	Shri.Mamta Mahesh Divkar	V.P. panch	III	Navedar	33	Residential
				Gurukrupa Colony	68	Residential
				Umalyachi Mali	54	Residential
4	Shri.Guruprasad G. Naik	V.P. Sarpanch	IV	Pratap Nagar	132	Residential
5	Shri.Ankush Ramnath Malik	V.P. panch	V	Pousawada	212	Residential

<b>Sr. No.</b>	<b>Ward No.</b>	<b>Wadas</b>	<b>No. of Households</b>	<b>Collection &amp; Segregation Date</b>
1	I	Upper Harvaalem	208	1 <sup>st</sup> and 15 <sup>th</sup> of every month
2	II	Madhalawada	126	1 <sup>st</sup> and 15 <sup>th</sup> of every month
3	III	Navedar	33	2 <sup>nd</sup> and 16 <sup>th</sup> of every month
		Umalyachi Mali	54	
		Gurukrupa Colony	68	
4	IV	Pratap Nagar	132	2 <sup>nd</sup> and 16 <sup>th</sup> of every month
5	V	Pousawada	212	1 <sup>st</sup> and 15 <sup>th</sup> of every month
		<b>Total</b>	833	
Segregation and cleaning of Black Spots				3 <sup>rd</sup> , 4 <sup>th</sup> , 5 <sup>th</sup> , & 17 <sup>th</sup> , 18 <sup>th</sup> & 19 <sup>th</sup> of every months

**THE ELECTED REPRESENTATIVES OF V.P. HARVALEM**



## Costing and Economics

Harvalem Village Panchayat has been sanctioned Rs. 3,00,000 by Directorate of Panchayat as their

first & Second instalment towards solid waste management.

### Monthly Expenses

Labour charges: for Collection and segregation is.Rs. 28,000/-.

Number of labours: 2(Both for collection and segregation)

Transportation charges: Rs. 3,000.00

Others Expenses is Rs. 5000 for Yearly.

.Total Expenses for a month 31,000:00

**INSTITUTIONS IN THE JURISDICTION OF VILLAGE PANCHAYAT**  
**HARVALEM , BICHOLIM GOA.**

<b><i>Name of the Institution</i></b>	<b><i>Wada</i></b>	<b><i>Ward No.</i></b>
<b><i>Government Balwadis/ Anganwadis</i></b>	<i>1. Anganwadi at Upper Harvalem</i>	<i>I</i>
	<i>2. Anganwadi at Madhalawada Upper Harvalem</i>	<i>II</i>
	<i>4. Anganwadi at Pratap Nagar</i>	<i>IV</i>
<b><i>Primary Schools</i></b>	<i>1. Govt. Primary School, Upper Harvalem</i>	<i>I</i>
	<i>2. Govt. Primary School, Pratap Nagar Harvalem</i>	<i>IV</i>
<b><i>High Schools</i></b>	<i>1. Shr.Ganesh Vidhyalay High School, Harvalem</i>	<i>III</i>

*The Panchayat has also constituted the Village Waste Management Committee as mandated under the Goa Non-Biodegradable Garbage (Control) Act, 1996 on 19/12/2017. The list of members is provided in Table 2*

**Table 2: Garbage Waste Management Committee:-**

<b><i>Sr. No.</i></b>	<b><i>Name of the Members &amp; Address</i></b>	<b><i>Particulars</i></b>	<b><i>Designation</i></b>	<b><i>Phone No.</i></b>
<i>1</i>	<i>Dr. Pramod P. Sawant r/o. Kothambi-Pale, Bicholim Goa.</i>	<i>M.L.A. of Sankhali Constituency</i>	<i>Ex-officio Member</i>	<i>9765599920</i>
<i>2</i>	<i>Shri .Guruprasad G. Naik /o, , Pratap Nagar, Harvalem Bicholim Goa.</i>	<i>Sarpanch (Ward No. IV)</i>	<i>Chairman</i>	<i>9764214871</i>
<i>3</i>	<i>Sou.Nandini Nandu Gawas Upper Harvalem Bicholim Goa.</i>	<i>Dy. Sarpanch (Ward No.I)</i>	<i>Dy.Sarpanch</i>	<i>9158072105</i>
<i>4</i>	<i>Shri .Ankush Malik Upper ,Harvalem Bicholim Goa.</i>	<i>V. P. Member (Ward No.V)</i>	<i>Member</i>	<i>9545261559</i>
<i>5</i>	<i>Shri Raju F. Malik Upper Harvalem Bicholim Goa.</i>	<i>V. P. Member (Ward No.II)</i>	<i>Member</i>	<i>9923853954</i>
<i>6</i>	<i>Shri. Vinod Haldankar (Sanitary Inspector)</i>	<i>Member</i>	<i>Member</i>	<i>9422446774</i>
<i>7</i>	<i>Shri.Prajanand Naik Borkar</i>	<i>Member</i>	<i>Secretary</i>	

**Quick response team to tackle Garbage problem on immediately basis:-**

<b><i>Sr. No</i></b>	<b><i>Name</i></b>	<b><i>Address</i></b>	<b><i>Designation</i></b>	<b><i>Contact No</i></b>
<i>1</i>	<i>Shri Shri .Guruprasad G. Naik /o, , Pratap.Nagar, Harvalem Bicholim Goa.</i>	<i>Pratap Nagar, Harvalem Bicholim Goa.</i>	<i>Sarpanch</i>	<i>9764214871</i>
<i>2</i>	<i>Sou.Nandini Nandu Gawas Upper Harvalem Bicholim Goa</i>	<i>Upper Harvalem Bicholim Goa.</i>	<i>Dy. Sarpanch</i>	<i>9158072105</i>
<i>3</i>	<i>Shri Raju F. Malik Upper Harvalem Bicholim Goa</i>	<i>Upper ,Harvalem Bicholim Goa.</i>	<i>Committee member</i>	<i>9923853954</i>

**Details of Staff employed for Garbage management(Daily wages )**

<b><i>Sr.No</i></b>	<b><i>Name of Labour</i></b>	<b><i>Contact No.</i></b>
<i>1</i>	<i>Kailas S. Gawas (Vehicle Driver)</i>	<i>7875241146</i>
<i>2</i>	<i>Raghunath Malik</i>	
<i>3</i>	<i>Shamba Malik</i>	

## **A. AWARENESS STRATEGY:**

*While a lot has been done in the past to create awareness on the issue of waste, following will be the strategy for awareness generation so as to reach various sections of the Society.*

- 1. Compile a list of NGO's/Youth clubs/Mahila Mandals/SHG's/Sports Club and any other social group with the village and reach out to them for creating awareness about the efforts being taken by the Panchayat and also make an appeal to support the programme and volunteer for a cause.*
- 2. Each Panch member will make a door-to-door visit to all the houses in his/her ward to speak to the households about the issues that they face as well encourage those that do not segregate to start doing so. This visit will be done once in 3 months.*
- 3. The Panch members will also have a common meeting of all ward members at a common location to appraise them about the progress and also address certain issues faced by the community. External resource persons can be invited for these sessions.*
- 4. The Panchayat body will have a monthly review meeting, other than the regular fortnightly meetings, to discuss only the SWM subject at a convenient date and time to all members.*
- 5. Special emphasis is to be given to educational institutes since the student community is the future of the village and the State. Two sessions are to be held in each educational institute in each semester. While the first session will include introducing the students to the basics of waste management and explaining the work being done in the Panchayat, the second session should include some activity such as a quiz, best out of waste or an exposure visit to the collection centre.*
- 6. The Panchayat will also put up roadside hoardings at the entrance and exist of the village so that not only the local community but commuters also know about the work being done by the Panchayat.*
- 7. As a motivation towards segregating waste the Panchayat will also award small prizes for those giving good amount of waste.*

## **B. COLLECTION STRATEGY:**

*The collection as is being done at present is working well though the efficiency needs to improve. The following strategy is suggested:*

- 1. Collection to be carried out as per Annexure –I Since Harvalem has 833 households, and 5 commercial Households has to be serviced in three days keeping efficiency of workers to collect in a day and hence labourer will be serviced (door to door collection) as per Annexure-I of every month. The collection will be done by a team of two Male labours supported by a Panchayat with own vehicle TATA ACE bearing No. GA-04-T-5696. Further, after every collection are marked for segregation which will be done by a team of two male labours. 5 days are extended if the waste collected is more in quantity.*
- 2. Harvalem being a rural village with independent houses, the wet waste is traditionally taken care off by feeding to pets, cattle or using as manure for trees and in the garden. Hence, it was decided that only dry waste will be handled by the Panchayat.*
- 3. The Panchayat has decided to follow the existing worker model for collection instead of the contractor model, since the present model is working well without any hitches. To boost participation of rural youth and as a livelihood option.. The Panchayat may also work on other cost effective model. The contractor model can be thought of in the future if the need arises.*
- 4. But Panchayat presently segregate / disposal garbage near Panchayat Ghar in Sy. No.125/0.*
- 5. The village of Harvalem celebrates Zatras (Temple fairs) at the following temples:
  - a. Shree Sateri Devastahan ,Upper Harvalem*
  - b. Shree Kelbai Devastahan ,Upper Harvalem*
  - c. Shree Nagnath Devastahan ,Pratap nagar Harvalem*
  - d. Shree Satineshwar Devastahan ,Navedar Harvalem**

*As a strategy it has been decided to get the Mahajan Committees on board by writing letters to them in this matter and seek their co-operation. All the shops are to be given bags for collection of waste and Panch members along with volunteers and the Temple Committee members should monitor the usage of these bags.*

- 6. The Panchayat has Three (3) black spots (marked on the map). The black spots will be cleared by Panchayat appointed labours as per Schedule Time table . The same applies to road side cleaning.*
- 7. The call login for collection to be done by GWMC will be done by the Secretary and alternatively by the Clerk in the absence of the Secretary. It was also decided to maintain a register of the call logs to be done by the Panchayat.*

- 8. It was decided to pay the labours on monthly basis to keep them motivated. Also a master roll for labours to be kept in the Panchayat. Further, to support the ongoing efforts the labours to be provided with gloves, masks, gumboots (during level two segregation at the centre), T-shirts and caps and raincoats for the monsoons.*



### **C. MONITORING STRATEGY:**

- 1. Panch members will conduct random labour monitoring during the collection days. The Panch members of respective wards will meet the labours on the scheduled route to interact with them while also observing if the work is being done properly.*
- 2. During the monthly review meeting on Waste Management Garbage management committee should be invited for discussions and making planning strategies as well.*
- 3. It has been observed that there is no information shared with the Panchayat about the visit of the GWMC contractor for collection of waste. The date and especially the time needs to be conveyed to the Panchayat so that Panchayat representative can be deputed to the collection centre.*

### **D. ENFORCEMENT STRATEGY:**

- 1. It was noticed that the good work being done by the Panchayat. Hence, it was decided that a pamphlet be printed detailing the work done so far as*

*well as the recognition the Panchayat has received. This will also act as an awareness strategy. Further, the same pamphlet while attributing this success to the people of Harvalem will also have a section detailing individual responsibilities as per the law of the land as well as fines that can be attracted for not following them. This information is to be circulated to each and every house with a register to be maintained and signed by the receiver. This is a strategy that will help the Panchayat levy fines in the future for defaulters.*

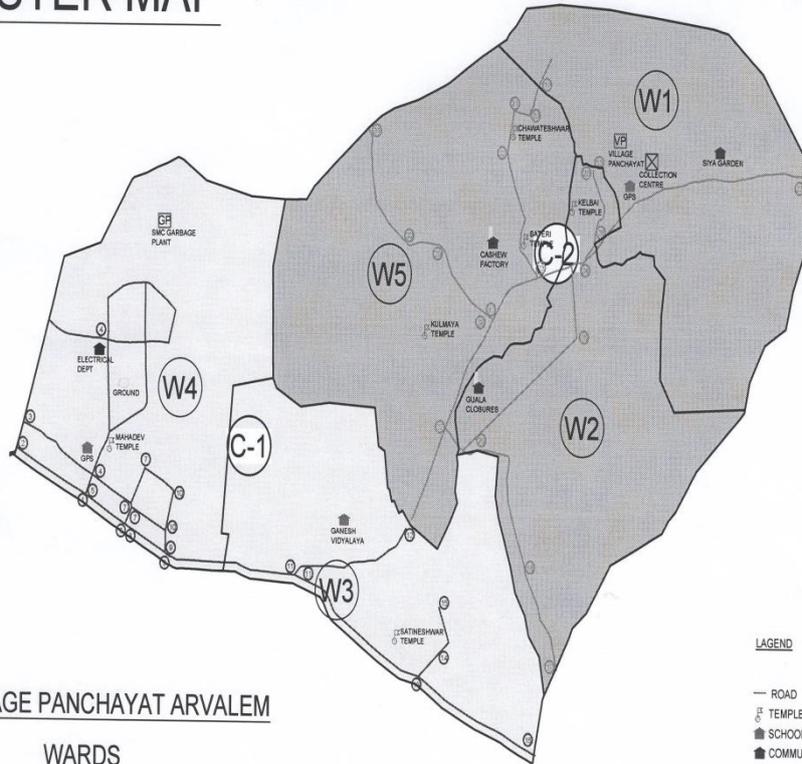
- 2. Panchayat has also impose Garbage Tax from the villagers w.e.f. 01/04/2018 which was passed in ordinary Gram Sabha dated 27/01/2019*

***E. GRIEVANCE REDRESSAL STRATEGY:***

*It was decided to keep complaint register in the Village Panchayat office. The calls of grievances will be received by Village Panchayat Clerk and accordingly noted on register. All the complaints recorded will be discussed and resolved in monthly review meeting and the acknowledgement will be sent to concern person*

# VILLAGE PANCHAYAT ARVALEM

## CLUSTER MAP



### VILLAGE PANCHAYAT ARVALEM

#### WARDS

- 1). VARCHA WADA
- 2). KELBAI WADA, MUSLIM WADA, DEVNYA AKADIL WADA
- 3). SHIVKRUPA COLONY, UMLYACHIMALI, NAVEDAR, GURUKRUPA COLONY
- 4). PRATAP NAGAR, BRHAMA RASHTROLI COLONY
- 5). NEAR GUALA, HARIJANWADA, PAUSTWADA, NEW COLONY

#### LEGEND

- ROAD
- ☪ TEMPLE
- 🎓 SCHOOL
- 🏠 COMMUNITY HALL
- 🏢 COLLECTION CENTER
- 🏘 VILLAGE PANCHAYAT
- GROUND
- 🏭 INDUSTRY / FACTORY
- 🏢 OFFICE
- 🗑 GARBAGE PLANT
- ROUTE (CLUSTER-I)
- ROUTE (CLUSTER-II)
- CLUSTER - 1
- CLUSTER - 2

