

# **International Labour Organisation**

**STUDY OF SCRAP COLLECTORS, SCRAP TRADERS  
AND  
RECYCLING ENTERPRISES IN PUNE 2001**

# VIEWS ON THE INFORMAL SECTOR

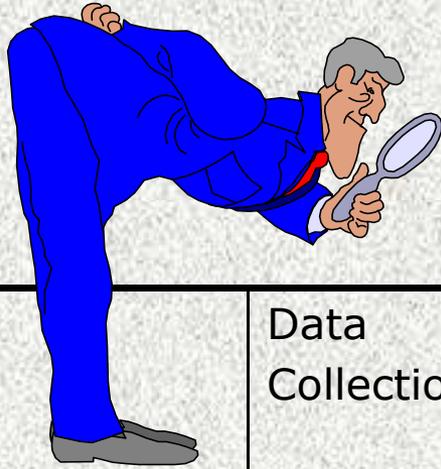
Whether to promote the informal sector as the provider of employment?

OR

Whether to extend regulation and social protection thereby reducing its capacity to provide jobs and incomes?



# STUDY DESIGN



	Data Collection	Sample size	% of Pop.	Baseline Data Source	Stratification
	75 % Researchers	252	5.5	Union registration	Category Gender Location
	75 % Researchers	72	20	SNDT	Category Commodity Location
	100 % Researchers	17	Source Pune Scrap	MCCIA Yellow pages Directories	Commodity



## **Itinerant Buyers**

<b>Male</b>	<b>1018</b>
<b>Female</b>	<b>562</b>
<b>Total</b>	<b>1580</b>



# **SCRAP COLLECTORS**

## **Wastepickers**

<b>Female</b>	<b>2781</b>
<b>Male</b>	<b>233</b>
<b>Total</b>	<b>3014</b>



**Every other scrap collector is under 35 years of age.**

**9 out of 10 wastepickers are women,  
2 out of 3 itinerant buyers are men.**

**25 per cent of the women between the ages of 19 and 35 are widowed or deserted.**

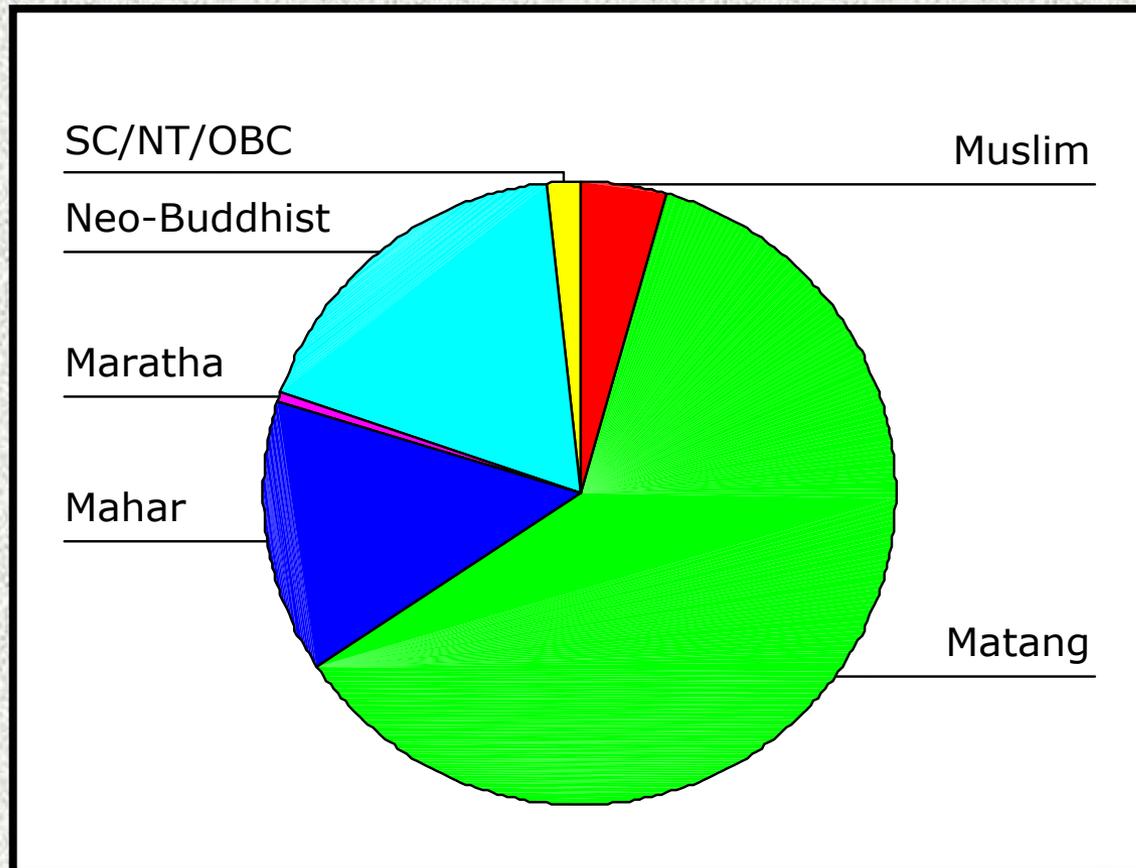
**9 out of 10 women are illiterate,  
5 out of 10 men are illiterate.**

## **PERSONAL PROFILE OF SCRAP COLLECTORS**

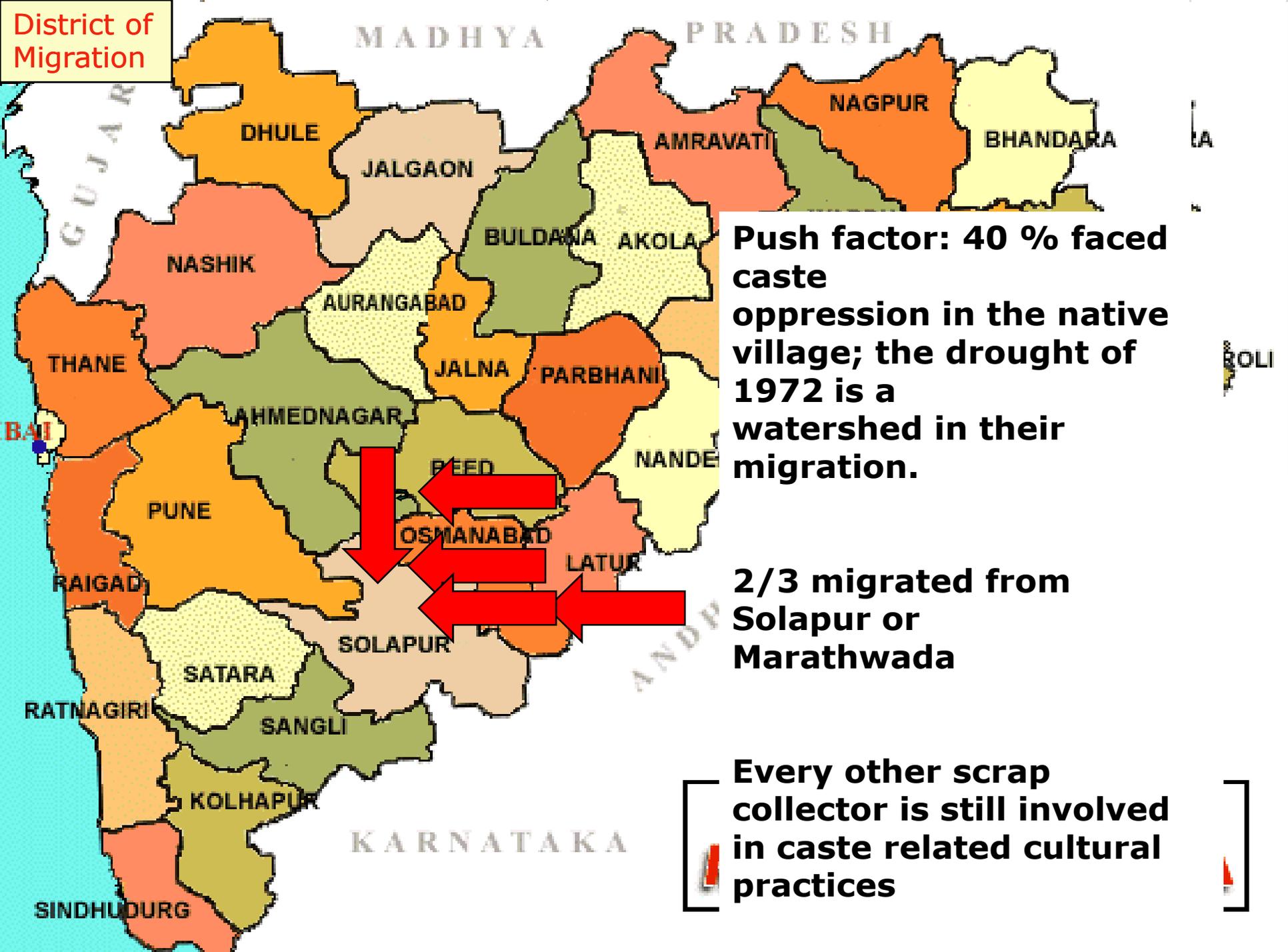
**Every scrap collector is a Matang, Mahar or Neo-Buddhist**

**Every third household is woman headed**

**One in every two households has up to 5 members**



District of Migration



**Push factor: 40 % faced caste oppression in the native village; the drought of 1972 is a watershed in their migration.**

**2/3 migrated from Solapur or Marathwada**

**Every other scrap collector is still involved in caste related cultural practices**

# SPATIAL DISTRIBUTION AND LIVING CONDITIONS OF SCRAP COLLECTORS IN PUNE

50 % have photo-passes

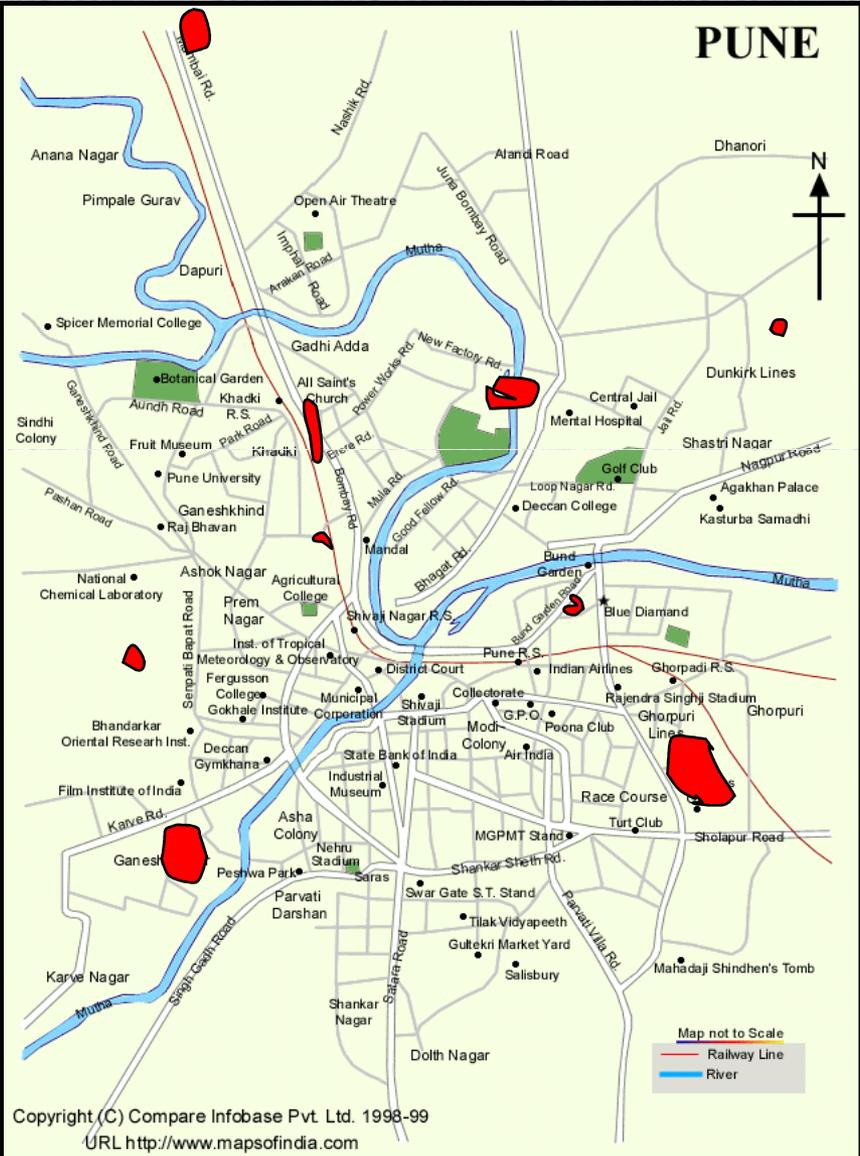
50 % have own water connection

10 % live in undeclared slums

50 % have own electric connection

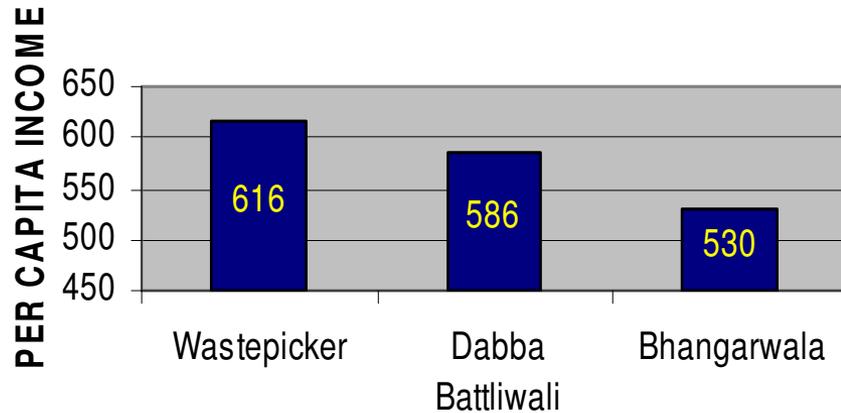
Average size house 100 sq.ft.

**Most are old Dalit habitations**

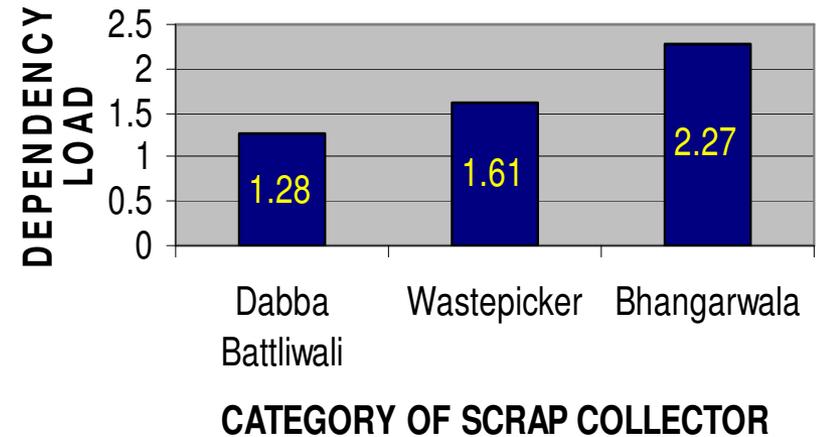




## MEAN MONTHLY PER CAPITA HOUSEHOLD INCOME



## ECONOMIC DEPENDENCY

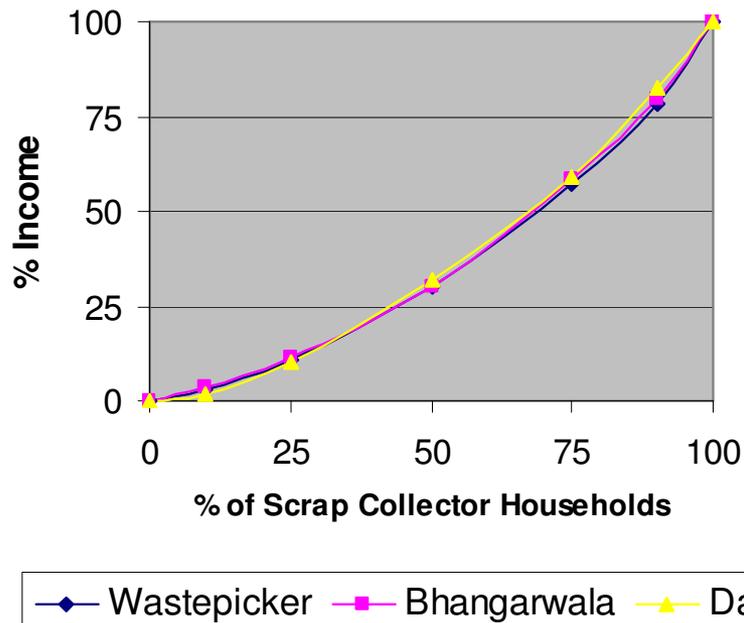


**Mean monthly PCI of scrap collectors is Rs.591**

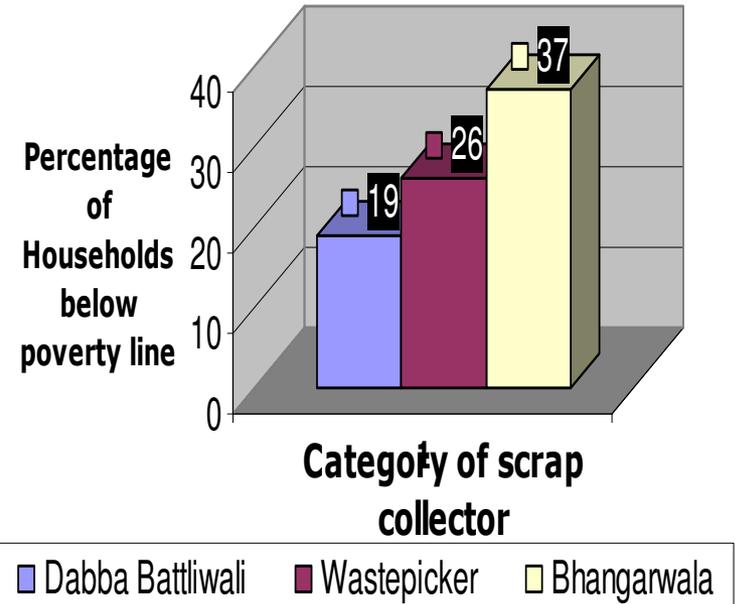
**Mean monthly PCI: The Highest for wastepickers  
The Lowest for bhangarwalas**

**The economic dependency load is the highest in Bhangarwala households**

## INCOME INEQUALITY



## INCIDENCE OF POVERTY



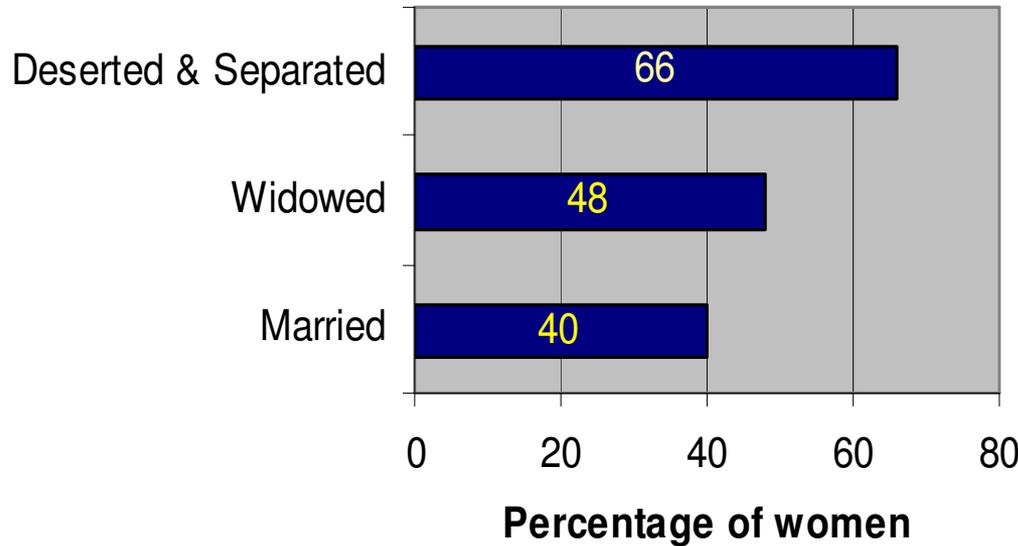
**One in four scrap collectors' households is below the urban poverty line**

**The incidence of poverty is highest among Bhangarwalas due to the higher economic dependency load**

Distribution of income is unequal within each category of scrap collectors

The share in the income of the bottom 10% of households is around 3% and that for the top 10% is around 20%

# WOMEN SCRAP COLLECTORS CONTRIBUTING MORE THAN 50% TO HOUSEHOLD INCOME



**8% women are the sole earners in their households**

**45% women contribute more than 50% to household income**

**This proportion is 40% in married women staying with their husbands**

**Two out of three deserted/separated women contribute more than 50% to the household income**

**One in three deserted/separated women contributes more than 90% to household income**



**Only 1 in 10 scrap collectors saves money in a bank**

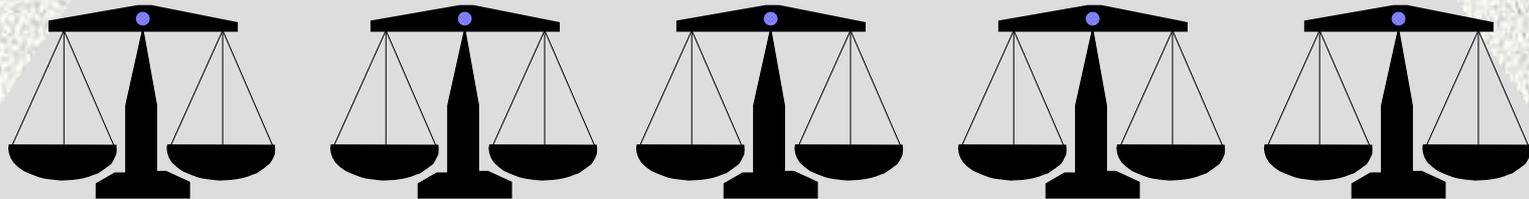
**25% use the scrap collectors cooperative**

**50% choose not to be indebted at all**



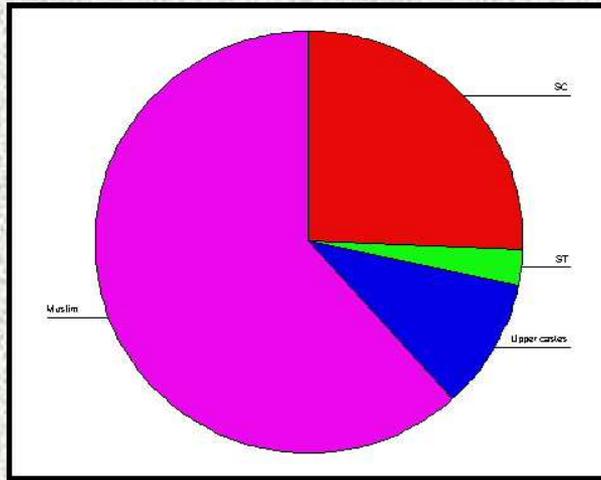


**Wholesale Traders are 'closer' to other Traders and Reprocessors**

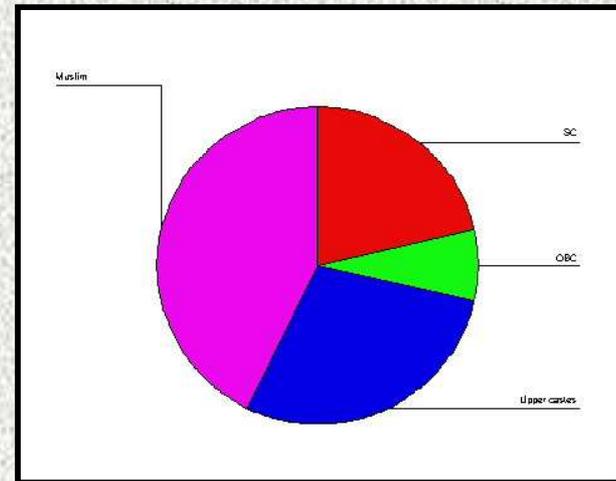


**Retail Traders are 'closer' to scrap collectors**

# RETAILER



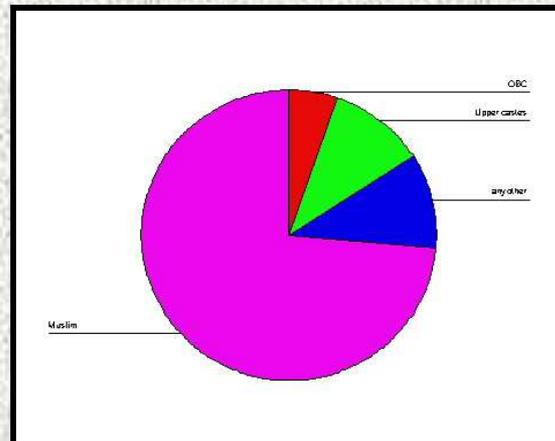
# STOCKIST



**Retailers are younger**

**Wholesalers belong to the higher castes**

# WHOLESALER

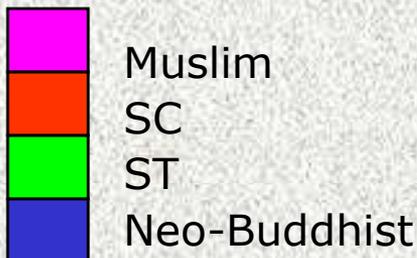


**Wholesalers are more educated**

**Scrap Trade is largely dominated by males**

**1/2 the Traders live in slums**

## KEY



# **Child labour constitutes 3.2 per cent of the total labour in scrap collection**

**The estimated number of child wastepickers in Pune is around 150**

**Most are girls**

**Older siblings who accompany wastepickers as child minders are a separate category**

**One in ten children of scrap collectors are out of school**



**Majority of the scrap collectors source domestic scrap**

**4 out of 5 wastepickers collect scrap from garbage bins and from the streets**

**75 % of scrap collectors walk for more than 5 hours to collect scrap**

**Majority work more than 8 hours per day**







**Most scrap collectors sort scrap outside the scrap trade establishment.**

**Wastepickers use only sacks. Only 1/5 uses a makeshift rake.**

**1 in 2 wastepickers transport scrap on the head.**

**Female itinerant buyers use baskets.**

**Male itinerant buyers use pushcarts. 28 % use hired pushcarts.**

**50 % of the itinerant buyers borrow working capital, mostly from the retail trader.**

## TOTAL DAILY QUANTUM COLLECTED BY WASTEPICKERS \*

RS	(13 MT)
WHITE	(9 MT)
PUSHTA1	(8 MT)
PUSHTA2	(4 MT)
MIX MEIN	(13 MT)
MEIN 1	(5 MT)
MILK BAG	(2 MT)
BHANGAR	(3 MT)
PATRA	(3 MT)
KADAK	(1.5 MT)
FUGA	(3 MT)
CABLE	(1 MT)
CHAPPAL	(0.5 MT)
<u>GLASS</u>	<u>(13 MT)</u>
<u>TOTAL</u>	<u>79.00 MT</u>

•50% of the total collection is of low value commodities such as RS, mix mein and glass.

\* Excluding bottles & minor scrap items



**TOTAL DAILY QUANTUM  
COLLECTED BY BHANGARWALAS \***

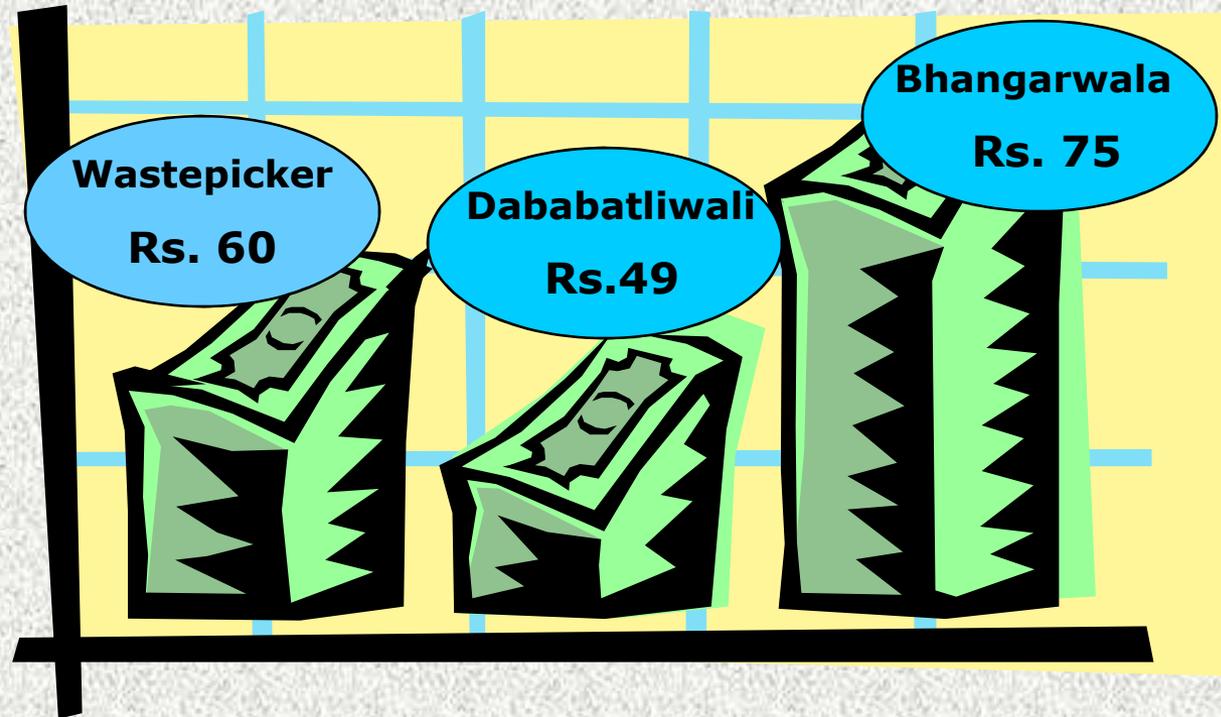
<b>WHITE</b>	<b>(2 MT)</b>
<b>(paper)</b>	
<b>PUSHTA1</b>	<b>(8 MT)</b>
<b>PUSHTA2</b>	<b>(5 MT)</b>
<b>Corrugated Board)</b>	
<b>MILK BAG</b>	<b>(0.8 MT)</b>
<b>(LD Plastic)</b>	
<b>BHANGAR</b>	<b>(16 MT)</b>
<b>(Ferrous metal)</b>	
<b>PATRA</b>	<b>(8 MT)</b>
<b>(Tin)</b>	
<b>KADAK</b>	<b>(0.7 MT)</b>
<b>(IM plastic)</b>	
<b>FUGA</b>	<b>(3 MT)</b>
<b>(BM plastic)</b>	
<b>CABLE</b>	<b>(1 MT)</b>
<b>CHAPPAL</b>	<b>(0.5 MT)</b>
<b>GLASS</b>	<b>(5 MT)</b>
<b>TOTAL</b>	<b>50.00 MT</b>



**\* Excluding bottles & minor scrap items**

**• The prices of all commodities excluding glass, are above Rs.3.00 per kg**

# MEAN DAILY INCOME OF SCRAP COLLECTORS



## Perquisites

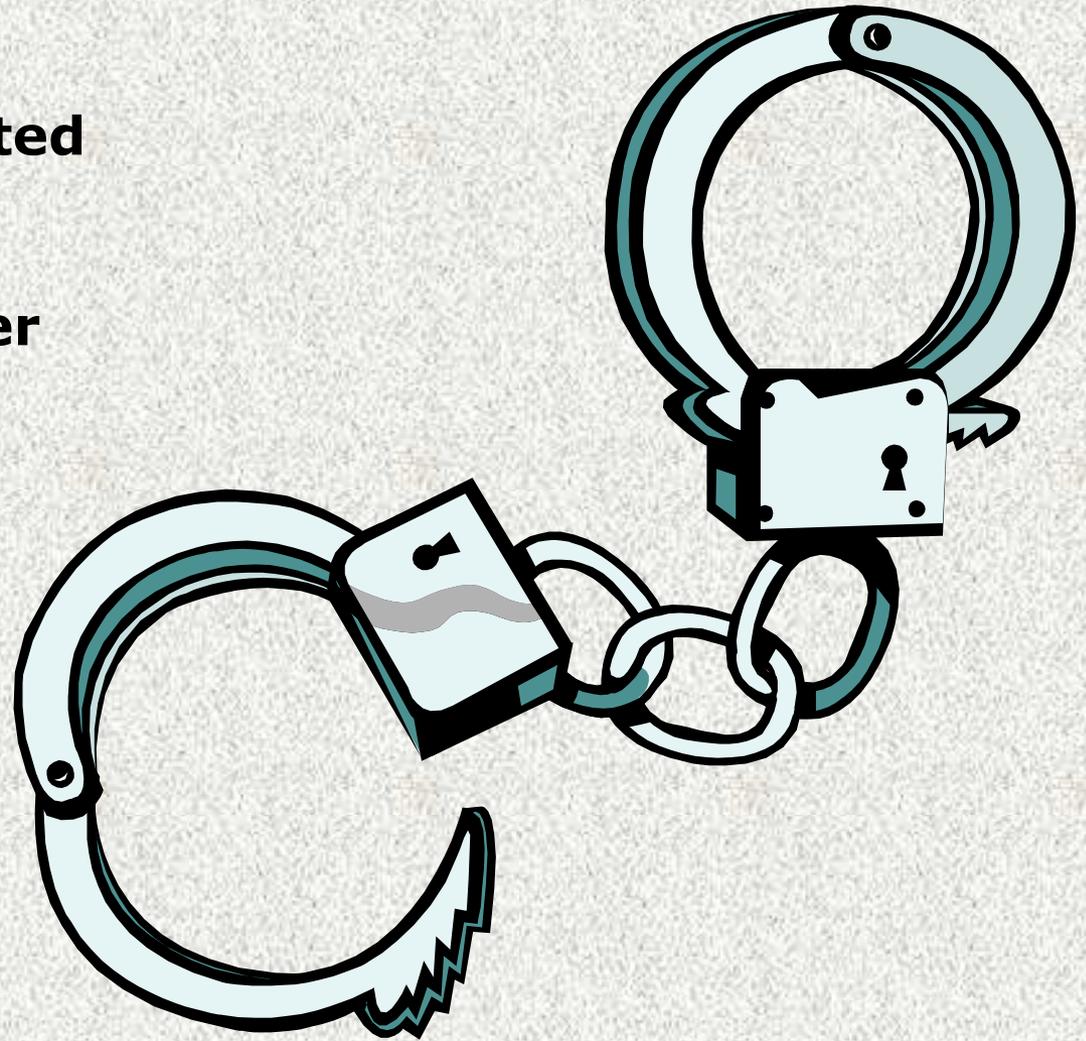
- 30 % have been bitten by dogs
- 1/100 has 'child care' facilities
- Access to 'paid' drinking water
- Rest room?
- Every other scrap collectors gets Diwali bonus of Rs.250
- (less than 1 % of total annual income)

**One in ten scrap collectors is accused of theft.**

**Every single one is acquitted**

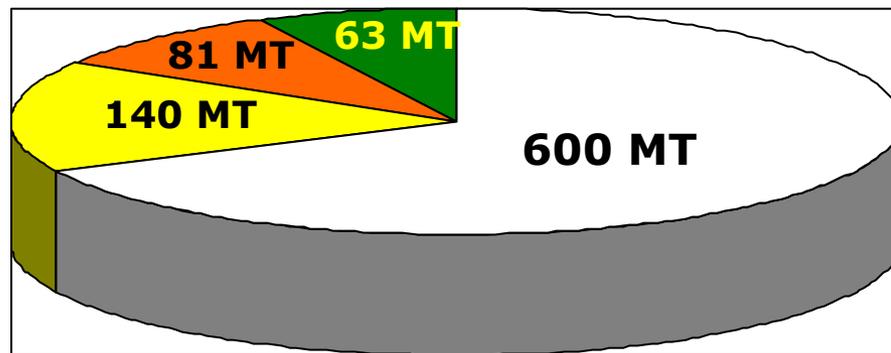
**One in ten is harassed by security personnel or other citizens**

**One in ten is harassed by municipal staff**



**The Trade Union or scrap trader is approached for assistance**

# SCRAP COLLECTORS' CONTRIBUTION TO URBAN SOLID WASTE MANAGEMENT



- PMC GARBAGE
- PCMC GARBAGE
- WASTEPICKERS SCRAP
- ITINERANT BUYERS SCRAP

**The municipalities save Rs. 8910891 per annum on account of wastepickers**  
**Each wastepicker contributes Rs.246 worth of free labour per month to the municipality**  
**Total saving on account of all scrap collectors is Rs.15822750**



**Wholesale traders specialise in specific commodities**



**Stockists are retailers who also purchase scrap from other retailers**



**General**



**Non-Bundle**



**General**



**Non Bundle**



**General**

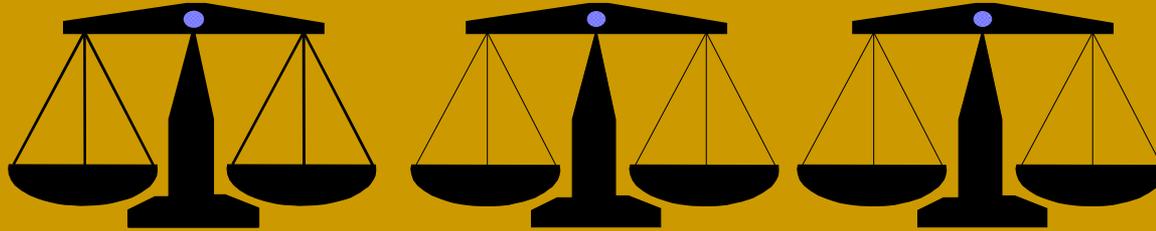
**Retailers are at the cutting-edge level in the trade**

# The Recycling Pyramid



**RECYCLERS**

**WHOLESALEERS**



The total value of the trade in Pune is Rs.185 million per annum

**STOCKISTS**



**RETAILERS**



The total earnings of scrap collectors in Pune amount to Rs.3.75 lakhs per day



1 % of the workforce is engaged in this sector



# The Recycling Pyramid



RECYCLERS

WHOLESALE



30

STOCKISTS



45

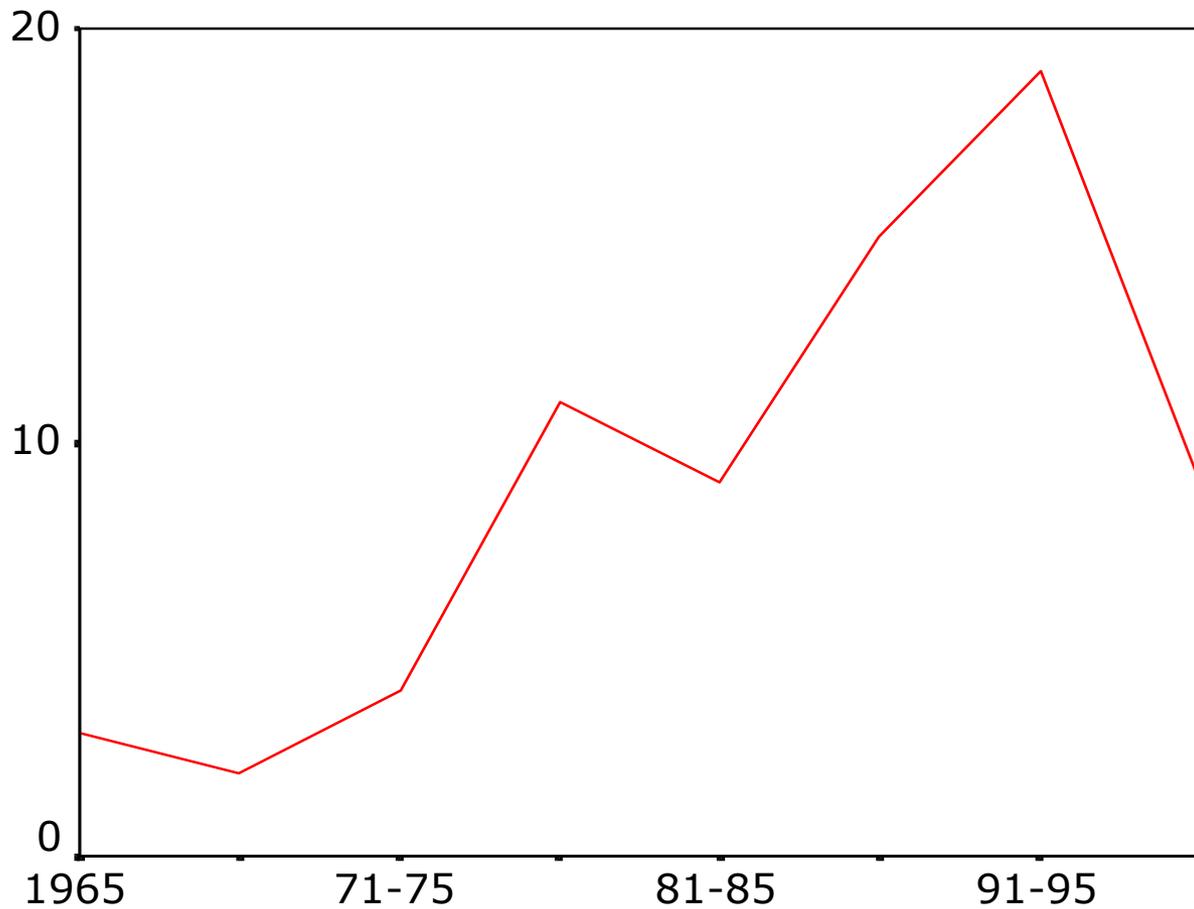
RETAILERS



425



5400 ITWBs and AWP



## **SPURT IN SCRAP TRADE**

- **50% were established between 1986 and 1995.**
- **Upward mobility from scrap collection to trade is very low.**
- **Entry is easier at the lower level than at higher level.**
- **4 out of 5 entered because it was the family business or had prior exposure to the trade.**

- **All trade establishments are privately owned and usually managed by the family**
- **Most are 100-200 sq.ft. in area**
- **Most are registered under the Shop Act**
- **All have minimal infrastructure**





**Most retailers use between Rs. 1000 and 3000 as working capital.**

**2/3 are self- financed.**

**Most retailers have 2-3 labourers.**

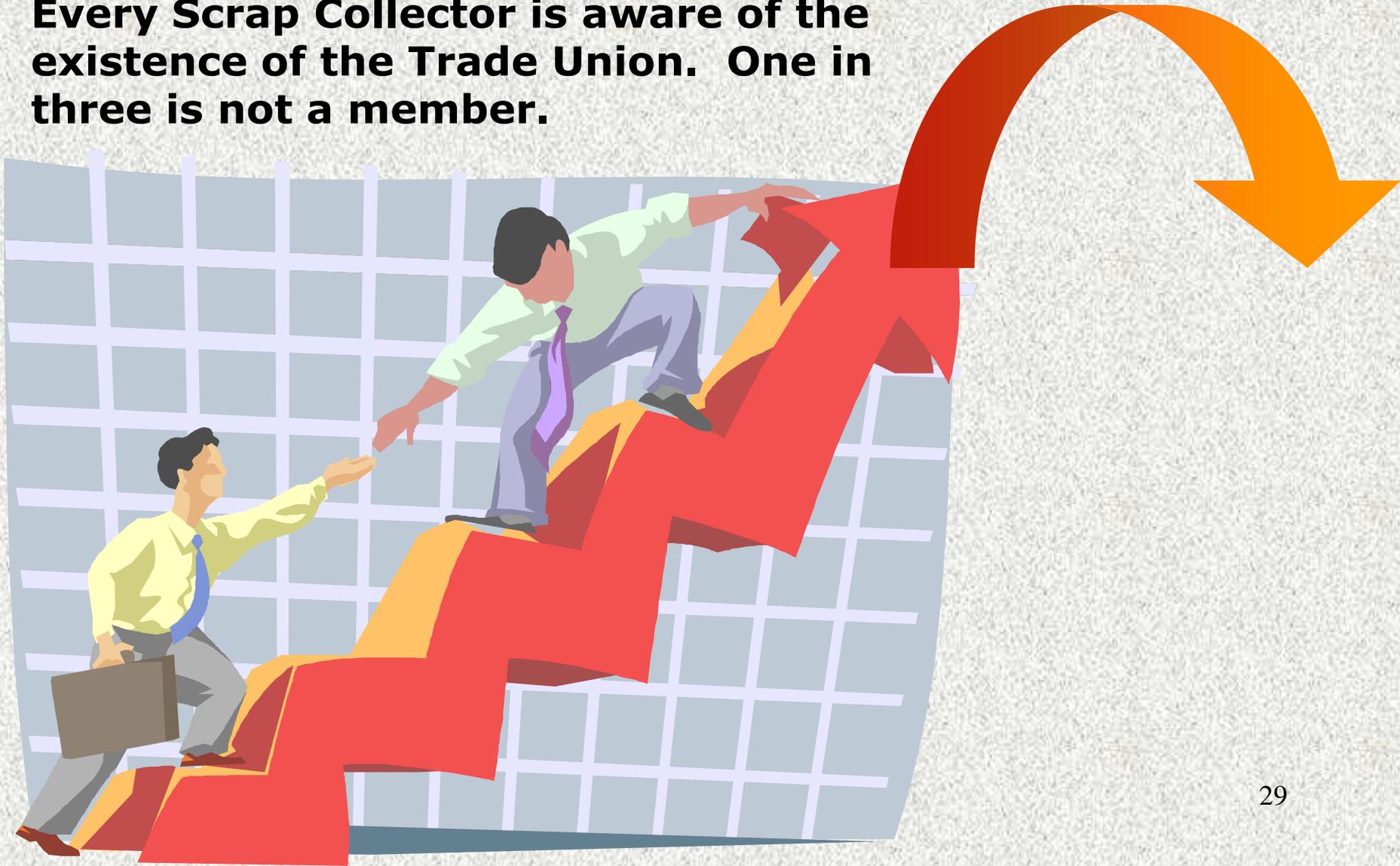
**90 % of the labourers are male.**

**Gender disparity in tasks and wages.**

**Family labour is 1/3 of total labour.**

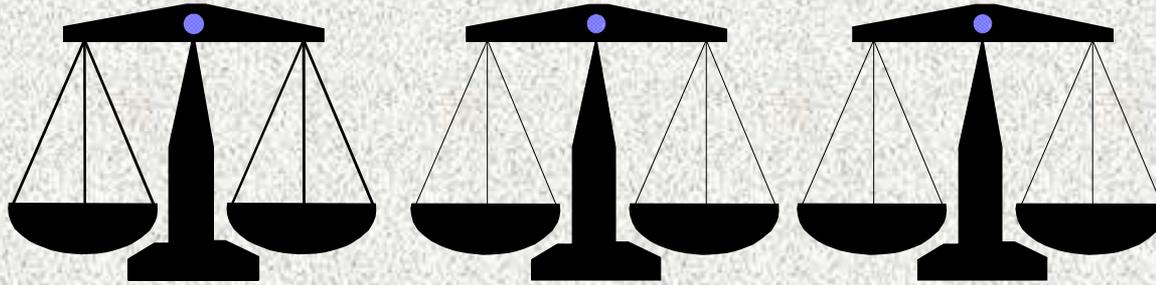
**Scrap Collectors see no alternative future for themselves outside this occupation.**

**Every Scrap Collector is aware of the existence of the Trade Union. One in three is not a member.**



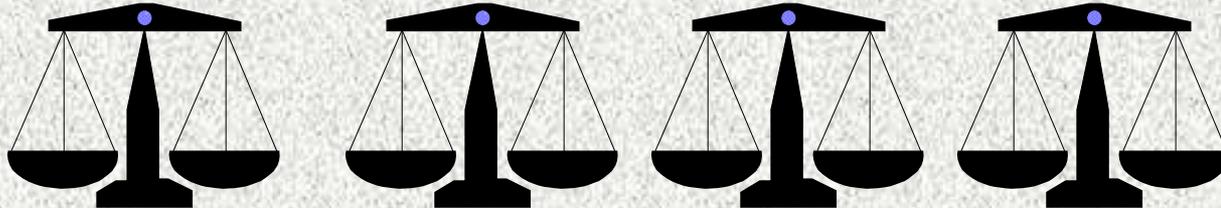
# STRUCTURE OF THE SCRAP TRADE MARKET

## WHOLESALE



The wholesale market is oligopsonistic. Market power is highest in RS and lowest in bhangar.

## STOCKISTS



Stockists have oligopsonistic powers. The prices are not sticky upwards.

## RETAILERS



The retail trade market is effectively competitive. No single trader has control over purchase prices.



# ESTIMATED DAILY QUANTUM OF SCRAP TRADE

Commodity	Traders' Estimate MT	Survey Estimate MT
Mixed mein	25	14
1 No. Mein		05
RS	09	13
Glass	30	19
Bhangar	20	21
Patra	05	14
Kraft	50	25
White record	05	11
'Plastic'	01	15
Milk Bags	02	03
<b>TOTAL</b>	<b>147*</b>	<b>140*</b>

**The survey estimate pertains to volume traded at the retail level.**

**The two estimates are similar in terms of total quantum traded but the commodity wise composition differs.**

**\* Excluding bottles that are traded in units**

## **AVERAGE PURCHASE PRICES AT DIFFERENT LEVELS OF TRADING ACTIVITY (Rs./p.kg)**

Commodity	Category of trader			Trade margin at Wholesale level
	Retailer	Stockists	Wholesaler	
<b>RS</b>	<b>0.89</b>	<b>1.10</b>	<b>1.40</b>	<b>54%</b>
<b>MIX MEIN</b>	<b>2.02</b>	<b>2.30</b>	<b>3.00</b>	<b>33%</b>
<b>WHITE</b>	<b>3.48</b>	<b>4.00</b>	<b>5.00</b>	<b>40%</b>
<b>PUSHTA</b>	<b>3.34</b>	<b>4.15</b>	<b>4.65</b>	<b>39%</b>
<b>PATRA</b>	<b>3.26</b>	<b>3.75</b>	<b>4.25</b>	<b>6%</b>
<b>BHANGAR</b>	<b>5.02</b>	<b>5.42</b>	<b>5.75</b>	<b>4%</b>
<b>GLASS</b>	<b>0.97</b>	<b>1.25</b>	<b>1.45</b>	<b>69%</b>
<b>BEER*</b>	<b>1.95</b>	<b>2.15</b>	<b>2.50</b>	<b>4%</b>

**\* Price per piece**

**Retailer: Higher Trade Margin-Lower Volume**

**Stockists: Lower Trade Margin-Higher Volume**

**Wholesaler: Higher Trade Margin-Higher Volume**

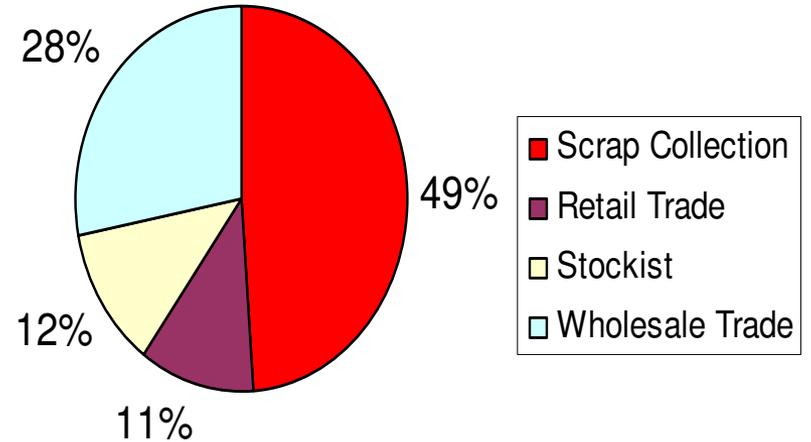


# SECTORAL OVERVIEW OF EMPLOYMENT AND INCOME

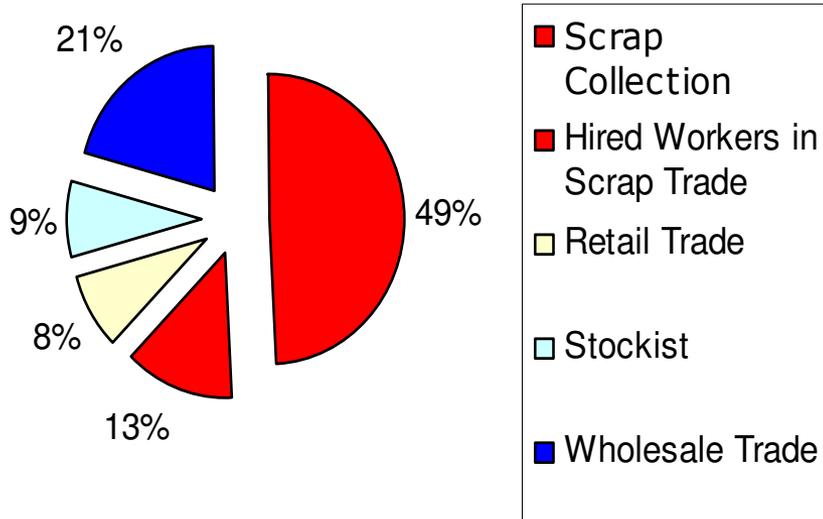
## Employment in Scrap Collection and Scrap Trade



## Income Generated in Scrap Collection and Scrap Trade

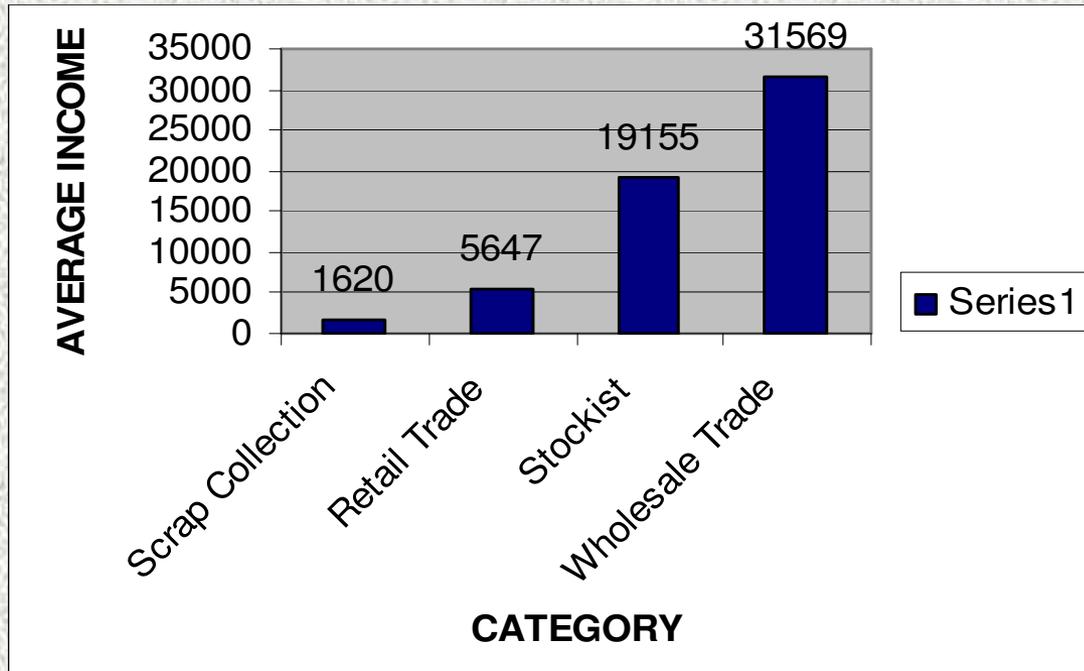


## Income Earned in Scrap Collection and Scrap Trade



- **Half the income is generated by scrap collectors, who constitute 76% of the total workers**
- **The remaining half is generated by traders**
- **62% of the income earned is the rewards for the labour of scrap collectors and workers in the trade establishment**
- **Wholesaler's earnings constitute 55% of the total earnings from the trade**

# AVERAGE EARNINGS IN SCRAP COLLECTION AND SCRAP TRADE



**The average earnings of scrap collectors and traders increase at decreasing rate with successive levels of economic activity.**

**Average earnings of hired workers in the trade is around Rs.2200 per month.**

**Three in four retailers earn less than the mean level of earnings.**

**Two in three stockists and wholesalers earn less than the mean level of earnings**

**Trade in bottles, bhangar, patra, kraft and fuga earns relatively higher than trade in RS and mix mein**

# SCRAP FROM PUNE JOURNEYS TO

**MALEGAON**

**Plastic 2**

**PUNE, SATARA**

**KRAFT-WHITE**

**NEW DELHI**

**PLASTIC**

**Metal (Ferrous  
& Non Ferrous)**

**PUNE,  
AURANGABAD**

**KARJAT, KHOPOLI,  
PUNE, AURANGABAD,  
SOLAPUR**

**RS**

**GLASS**

**PUNE, BOMBAY,  
NASIK**

**PUNE, BOMBAY, SATARA**

**BOTTLES**

# SCRAP RECYCLING ENTERPRISES

	<b>Glass</b>	<b>Bottles</b>	<b>Bhangar -Patra</b>	<b>Mixed Mein</b>	<b>Plastic</b>	<b>RS</b>	<b>Kraft- White</b>
<b>Type</b>	<b>Factory Co.</b>	<b>Factory Co.</b>	<b>Factory Co.</b>	<b>SSI Prop.</b>	<b>SSI Prop.</b>	<b>SSI Prop.</b>	<b>Factory Co.</b>
<b>Process</b>	<b>Smelt Blow</b>	<b>Wash Fill</b>	<b>Smelt Cast</b>	<b>Clean Melt Granule</b>	<b>Sort Grind Melt Granule</b>	<b>Pulp Roll Dry Press</b>	<b>Pulp Roll Dry Press</b>
<b>Tech</b>	<b>Auto</b>	<b>Auto</b>	<b>Auto</b>	<b>Manual</b>	<b>Manual</b>	<b>Manual</b>	<b>Auto</b>
<b>% scrap used</b>	<b>40</b>	<b>20- 100</b>	<b>70</b>	<b>100</b>	<b>100</b>	<b>70-100</b>	<b>30-100</b>
<b>Product &amp; Market Segment</b>	<b>Contain ers  Mid- High</b>	<b>Bottles  Low- High</b>	<b>Ingots  Mid- High</b>	<b>Granules  Low</b>	<b>Granules  Low</b>	<b>Grey Board  Low</b>	<b>News- print Paper Mill Board Low</b>

# **FACTORS AFFECTING RECYCLING OF SCRAP**

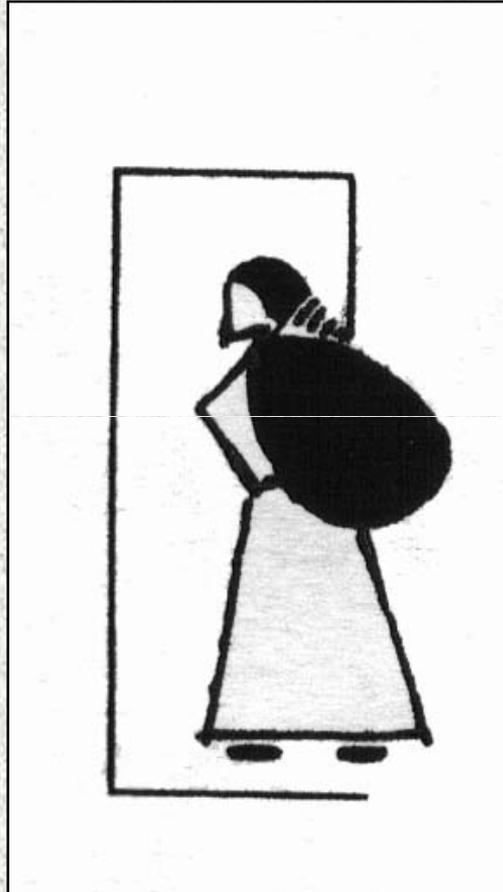
- **Increase in the manufacture of virgin plastic**
- **Imports of Paper and Plastic Scrap**
- **Government regulations on Plastic**
- **Withdrawal of concessions for utilisation of scrap**
- **Economic recession and low demand for products**
- **Replacement of Paper Packaging and Glass Containers by plastic**

# ORGANISATIONAL STATUS OF SCRAP COLLECTORS IN PUNE

**Trade union registered in 1993 to establish collective identity**

**Registered scrap collectors 4594**

**Identity Cards issued by the Union endorsed by the Pune & Pimpri Chinchwad Municipal Corporations in recognition of the contribution of scrap collectors**



**Union is represented on the Apex Sanitation Committee of the PMC**

**Space for scrap co-operative provided gratis by PCMC**

**Medical Insurance Premium paid by Pune Municipal Corporation**

# KEY INTERVENTIONS



- ❑ Redressal of complaints of harassment and abuse including domestic violence.
- ❑ Registered savings-credit co-operative of 1300 members.
- ❑ Group Insurance Scheme covering 800 members.
- ❑ Co-operative Retail Scrap Store.
- ❑ Lobbying for Legislative Protection.

**Compulsory school enrolment of children**

**Annual community marriage celebration**



**Action against  
Child Marriage**

**Action against  
Child Labour**

**Educational Incentives  
for Children**



# **STRATEGISING INTERVENTION: SOME DILEMMAS**

**Too many collectors too little scrap! Should entry be regulated?**

**Self-employed or Employed? Are they not unprotected manual workers?**

**Workers' rights or welfare handouts?**

**Perspectives on legislative protection**

**Source segregation of garbage improves conditions of work! How can the wastepickers claims to scrap be protected?**

**Targeted PDS & urban BPL: 'Targeting' the urban poor to exclude them**

**Market intervention in the trade: High costs & high risks**

**Health Care & Education are the responsibility of the government! What happens when these are privatised?**

