A Statistical Overview of Ebeye Part Three: *Household Characteristics*

By Ben Graham and Charles Paul (This is the third in a series of short essays focusing on social and economic changes on the island of Ebeye¹)

The conditions and characteristics of peoples' homes are important indicators of the overall social and economic status of a given population. Basic household characteristics give valuable insight into a population's standard of living and general quality of life.

As two previous essays have demonstrated, the people of Ebeye have experienced tremendous social and economic change over the past several decades. This essay looks at changes at the household level, focusing specifically on topics such as average household size, new household growth, household income, and a number of basic household characteristics.

Household Growth

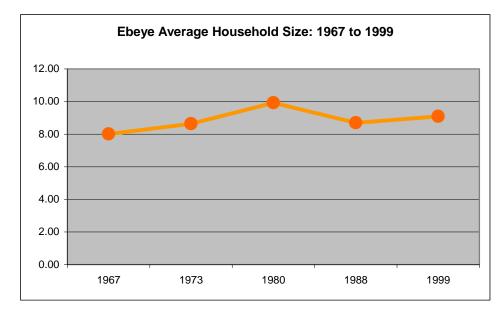
Between 1967 and 1999, Ebeye's population almost tripled while the number of households slightly more than doubled. With population growth exceeding household growth, the average household size (persons

Ebeye Household Growth: 1967 to 2002										
Subject	1967	1973	1980	1988	1999					
Total population	3.540	5.123	6.169	8.324	9,345					
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Total households	442	593	622	957	1028					
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Average household size	8.01	8.64	9.92	8.70	9.09					
	0.01	0.04	0.02	0.70	0.00					
Average new households/year										
5				10						
since previous census		25	4	42	6					
Notes: means data not available										
Source: Insular Areas Statistical Enha	ncement P	rogram								

per household) increased and households became more crowded.

On average, Ebeye had one more person per household in 1999 than in 1967. Average household size peaked at nearly ten persons in 1980, but then declined to just over nine persons by 1999.

Ebeye's average household size, despite this decline, still far exceeded the 1999 national average of 7.8.



The fastest periods of household growth were the late 1960s to early 1970s, with an average of 25 new homes built each year, and the 1980s, with over 40 new homes per year.

Household growth slowed dramatically after the 1980s, most likely as a result of diminishing space (Ebeye's total land mass is 0.14 square miles) and overcrowding.

¹ For those who do not already know, Ebeye Island, in Kwajalein Atoll, is the second most populated island in the RMI. Nearly 10,000 Marshallese reside on Ebeye, many of whom work on the Ronald Reagan Ballistic Missile Defense Test Site.

Household and Per Capita Income

Mean household and per capita income are calculated by dividing the aggregate income (from all sources) of Ebeye's population by the total number of households and the total population, respectively. Both mean household and per capita income on Ebeye more than doubled between 1980 and 2002.

In real terms (adjusting for inflation), however, incomes remained relatively unchanged as general price levels in the RMI also doubled during this period. The purchasing power of Ebeye residents, therefore, did not change significantly between 1980 and 2002.

Subject	1980	1988	1998	1999	200
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icome					
Mean household income	11,346		21,811	23,957	25,23
Per capita income	1,144		2,251	2,635	2,68
asic Characteristics					
Average rooms per household	3.6		3.9		3.
Households with concrete walls (%)	53.2		44.0	44.6	
Households with electricity (%)	90.8	88.8	95.0	94.8	98.
Households with refrigerator (%)	52.7		84.0	71.2	
Households with air conditioning (%)	19.8		56.0	48.9	
Households with television (%)	58.7		77.0	74.5	88.
Households with radio (%)	77.5		61.0	73.9	75.
Households with telephone (%)	1.1		38.0	46.8	48.
Households using kerosene stove (%)	34.2	33.6	34.0	55.4	86.
Households using piped water (%)	80.0	85.6	77.0	43.8	75.
Households using water catchment (%)	26.5	12.5	21.0	23.9	
Households with indoor flush toilet (%)	87.3	81.9	75.0	73.7	
otes: means data not available, income figures n	ot adjusted fo	or inflatio	n		
980, 1988 and 1999 data from RMI censuses, 1998	•				

Basic Household Characteristics Average rooms per household, a general indicator of the size of households, remained unchanged between 1980 and 2002 ("rooms" included all rooms: sleeping rooms, living rooms, kitchens, etc.). Ebeye homes remained very small, with less than four rooms on average.

The percentage of households with concrete walls declined over the period. Whereas more than half of Ebeye homes had concrete walls in 1980, less than half had concrete walls in 1999. Most of the new

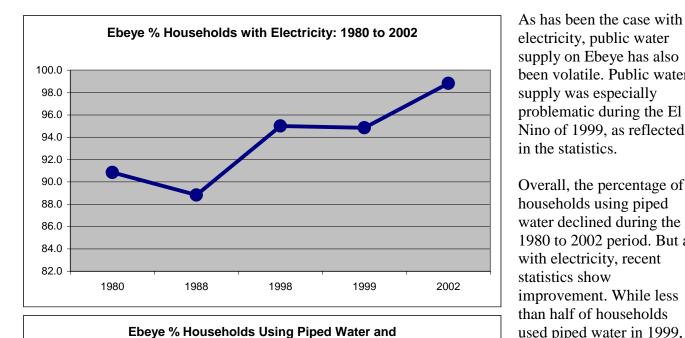
homes erected after 1980 were constructed with wooden or other types of walls.

Public electricity supply on Ebeye, notoriously unstable during the past couple of decades, has stabilized in recent years and the statistics reflect this. While the percentage of households with electricity fell during the 1980s, it rose to about 95% in the late 1990s.

The most recent data on Ebeye, collected during a survey funded by the US Department of Interior's Office of Insular Affairs in early 2002, indicates that in the past three years, the percentage of homes with electricity continued to rise – it was nearly 99% as of April 2002.

As the percentage of electrified households has risen, so too has the percentage of households with electronic appliances and amenities, including refrigerators, air conditioners, and televisions (in general). The percentage of households with telephones also increased (nearly half of all households have telephones) while the percentage with radios remained the same, at about 75%.

Somewhat ironically, the percentage of households using non-electric kerosene stoves for cooking has risen on Ebeye. More than half of households use kerosene stoves for cooking.



Water Catchments: 1980 to 2002

1998

Piped water

electricity, public water supply on Ebeve has also been volatile. Public water supply was especially problematic during the El Nino of 1999, as reflected in the statistics.

Overall, the percentage of households using piped water declined during the 1980 to 2002 period. But as with electricity, recent statistics show improvement. While less than half of households used piped water in 1999, nearly 80% were back online as of early 2002.

As would be expected, as the percentage of households using public water declined from 1980 to 1999, the percentage of households using private catchments, conversely, increased.

Lastly, the percentage of households with indoor flushing toilets declined.

Conclusion

90.0 80.0

70.0

60.0

50.0

40.0

30.0

20.0

10.0

0.0

1980

1988

This brief analysis, combined with the previous two essays on Ebeye, give clear evidence of dramatic social and economic change. While Ebeve's population and housing boom has leveled off, the island remains a popular destination for Marshallese seeking employment and other opportunities not available in the outer atolls -- and it is still one of the most densely populated places in the Pacific.

1999

Catchments

2002

In this three-part overview of Ebeve, a number of major trends were identified and analyzed. Some of these trends are quite positive, like the overall increase in elementary and high school educational attainment among adults and the recent improvements to public power and water supply. Still, a number of other trends are not so positive.

Whether they are positive or negative, it is only through statistical collection (via surveys and censuses), processing and analysis that we are able to identify trends and use them as tools in the planning and development of our islands.

Special thanks to Dr. Michael Levin

Note: This essay is produced under the auspices of the Insular Areas Statistical Enhancement Program and is not an official RMI or US Census Bureau report. For questions or comments, email: benjamin.m.graham@census.gov