



The National Income Accounts of Eepnagar

Dr. Mac R. Nomist, P.G.D.B.M. (WIMWI), *Ph.D.(PFU)**, the well-known National Income Accountant, was retained by the Worldly Bank to compile the National Income Accounts of the remote and backward island of Eepnagar. Accordingly, Mac (as he was known to his friends) packed his battered V.I.P. suitcase and embarked on his assignment. After a long and arduous journey, his ship finally dropped anchor at the island. Disembarking and pausing only to have a bath and change his salt-stained clothes, Mac sallied forth, bound for the cottage of Shri Cyrus Rotiwala, the baker, a keen amateur National Income analyst who had been maintaining the islands accounts, on and off, in the past.

After making small talk for a short while (and repairing the damage to Mac's clean shirt which occurred when Mac held Rotiwala's eighteen month old daughter in his arms), they got down to business.

Rotiwala informed him that there were six families on the islands. These were the families of

1. Shri Klumjee Mistry, the handyman and mechanic;
2. Shri Millka Malik, the owner of the wheat processing plant;
3. Shri Kamzor Kisan, the wheat farmer;
4. Shri Amitabhka Bachpan., the agricultural labourer who worked for Mr. Kisan;
5. Miss Margie Nally, who was employed as a secretary by Shri Malik; and of course, Shri Rotiwala himself.

Eepnagar, Mac found out, had a simple economy which revolved around the production, processing and consumption of wheat, so that besides wheat, flour and bread, the tools and implements produced by Shri Mistry were the only goods produced. As a first step in compiling the National Income accounts for the year that had just drawn to a close,

Mac decided to visit all the families and ask a series of simple questions designed to elicit from them records of their economic activities during the year. The results of Mac's efforts as found in his notes (but shorn of all irrelevant information) are shown in Appendix I.

Having collected the necessary information, the next step was to compile the Accounts. Shri Rotiwala enthusiastically volunteered his services and pressed Mac to allow him to compile the Accounts. Mac, with one eye on the future (and the other on the peculiar birds called Limas of which the island was the world's only natural habitat), agreed to let Rotiwala try his hand at compiling the Accounts in order to help him develop his skills.

This is what Rotiwala came up with.

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Case material of Indian Institute of Management, Ahmedabad, is prepared as a basis for class discussion. Cases are not designed to present illustrations of either correct or incorrect handling of administrative problems.

Exhibit I
Rotiwala Accounts
National Income Accounts of Eepnagar

Product Method	(In Cowries)	Income Method	(In Cowries)
Implements sold by Mistry	200	Mistry's Income	200
Wheat sold	500	Rotiwala's	100
Flour sold	1000	Income	400
Bread sold	1100	Kisan's Income Malik's Income	360
		Subtotal of Incomes Accruing to Owners of Unincorporated enterprises	1060
Gross National Product At Market Prices	2800	Total Wages and Salaries	240
Less Depreciation	20	Gross National Income At Factor cost	1300
		Less Depreciation	20
Net National Product at Market Prices	2780	Net National Income at Factor Cost	1280

Rotiwala proudly presented his handiwork to Mac. Mac however after viewing Rotiwala's accounts, had some misgivings as to their accuracy. Going back to his notes and books from EEP-I (where, he recalled, they had actually done a case on National Income Accounts), he discovered. that GNP (or NNP) at market prices differed from GNP (or NNP) at factor cost by the extent of indirect taxes less subsidies. Since the island had no taxes or subsidies, Mac concluded that Rotiwala had committed an error. Close examination of Rotiwala's calculations convinced Mac that the computation by the Income Method are indeed correct. He thus proceeded to recalculate the National Accounts by the Product and Expenditure Methods (Exhibit II).

Exhibit II
Mac's Initial Calculations
National Income Account of Eepnagar

Product Method

Expenditure Method

On examining these accounts however, Mac still felt that some mistake had been committed. He thus resolved to go back and try to elicit more data from the various citizens. This is what he found out this time.

Exhibit III
Additional Data Collected by Mac

Wheat production during the previous year	220 Kgs
Flour production during the previous year	100 Bags
Bread production during the previous year's	375 loaves
Wheat price in the previous year	2.60 cowries/Kg
Flour price in the previous year	10.00 cowries/Bag
Bread price in the previous year	4.00 cowries/Loaf

On the basis of this added data Mac was able to recast the basic accounts to his satisfaction. He then proceeded to make the following Annexures to the basic accounts (Exhibit 4).

Annexure I: Breakdown of GNP into Consumption and Saving

Annexure II: Breakdown of GNP into Consumption and investment with investment broken down by category (gross, net, net capital formation and inventory investment)

Annexure III: Non-marketed output.

Mac's principals at the Worldly Bank on receiving his report were gratified to see that the island's GNP had reached 1752 cowries and decided to send a high level 12 man delegation there to identify additional development strategies.

Appendix
Mac's Notes on Interviews
(all amounts are in Cowries the local currency)

(1) Shri Rotiwala's transactions

Bought flour	1000
Sold bread	1100
Took loan from Shri Kisan	50
Bought new oven door	150

(2) Shri Malik's transactions

Bought wheat	520
Sold flour	1000
Paid wages to Ms. Nally	120
Bought bread	360

(3) Shri Kisan's transactions

Sold wheat	520
Paid wages to Shri Bachpan	120
Bought bread	300
Bought tools	50
Loan to Rotiwala	50

(Note: Estimated depreciation of plough: 20)

(4) Shri Mistry's transactions

Sold handtools	50
Sold oven door	150
Bought bread	200

(5) Shri Bachpan's transactions

Received wages	120
Bought bread	120

(6) Ms. Nally's transactions

Received Wages	120
Bought bread	120

Suggestions to the reader

Identify the error in Exhibit I and then complete Exhibit II, Prepare Exhibit IV along with Annexures I, II, and III.