

SECOND CARNEGIE INQUIRY INTO POVERTY
AND DEVELOPMENT IN SOUTHERN AFRICA

African household incomes in
Vulindlela

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AFRICAN HOUSEHOLD INCOMES IN VULINDLELA

Vulindlela has seemed to me to be an interesting place in which to study African household incomes. By virtue of its location next door to a non-metropolitan but expanding urban centre and its relative climatic well-favouredness, it has contrived to combine peri-urban and semi-rural characteristics. In such an environment one might hope to find evidence of that growth in African real wages which took place in the 1970s (overall) and early 1980s - evidence certainly at the level of pay-packet and living-standards but possibly also in market support for locally-based, small-scale African business and self-employment: in transport, building, liquor distribution and possibly (though not necessarily) much else. At the same time one might be able to find out what happened to African agriculture under conditions both favourable and unfavourable. On the one hand in-migration of household reduced the average size of fields over time and many had only a small garden. On the other the concentration of population increased the size of the potential local markets and the proximity of Pietermaritzburg made access to agricultural inputs far easier than in some outlying districts. The pastures looked less eroded than those in hotter river valleys across the Tugela.

In terms of procedure one would want to study the various income-components both separately and in combination: separately, because it is not easy to measure green maize production (and consumption) or the real income from keeping cattle and they need to be hived off as separate projects; but in combination, because ultimately we are interested in the incomes of people in households - and at some stage the components must be brought together for a panel of households. How do the various components correlate across households? What difference do they make to mean incomes? Are most (or all) of the income-components dwarfed by wages from urban employment? Or are there categories of households for which this is not true? What does the distribution of income-from-all-sources across households look like?

At this stage I cannot answer most of these questions because I have not yet put the income-components together for a single sample. It is possible, however, to say something about most of the components on the basis of detailed separate studies - and from these it is possible to make comparisons of the average size of income flows from various sources.

The main income-components that are relevant are (i) wages and salaries, (ii) pensions and similar transfer payments, (iii) crop production in gardens, (iv) crop production in fields, (v) income from cattle-keeping, (vi) income from the keeping of other livestock and (vii) income from 'small businesses' or self-employment of various types - both locally and in town. On reflection it is clear that one should also include other subsistence components such as collected firewood, building materials, and the flow of accommodation benefits from owner-built housing. I have paid a little attention to these last items in my paper on relatively poor African households (Paper No. 27) but do not know enough to include them here.

(i) Wages and salaries

I shall write least about these two components because I do not have much that is new to say about them. I have simply from time to time asked people at home what wage-workers earn and of course this is not an altogether satisfactory procedure. They sometimes say they do not know; they may not in fact know. My processed figures on household incomes from wages and pensions relate to 1981 and yield an average monthly income of just over R200, with the median at R180 per month. This figure is partly based on conservative 'data-patching' - supplying R100 per month for unskilled or unspecified male workers and R30 per month for female domestics where there were gaps in the evidence. It also accepts several zero incomes as true.¹

Hofmeyr working with a large sample of 373 households in the same area a year later (more or less) obtained average household incomes which were larger than mine by more than the average rise in monthly earnings between 1981 and 1982. He interviewed employed persons about their own incomes, and devoted a good deal of attention to trying to elicit all incomes which were reaching the household of a cash sort; in particular he was able to identify a good deal of casual work carried out (for the most part in town). Average wage income per household was R81 per week (or R350 per month).² It seems clear that my figures need upward revision in the light of Hofmeyr's work, although there is one important reservation that needs to be entered: Hofmeyr confines himself to a sample of households with at least one adult male. The evidence from the study of low-income households is that they are predominantly female. Their inclusion must reduce the average income levels.

Given the importance of pensions in rural households it is interesting to note that in 1981 pensions in Vulindlela formed only 2,8% of household combined income from wages and pensions. Of course their importance to many individual households at the bottom end of the income distribution is considerable.

One issue not faced here is whether workers who are employed in Durban, Pinetown or Hammarsdale 'remit' their incomes - or rather how much they remit. Indeed the question arises as well for workers who stay in or near Pietermaritzburg (but away from home) during the week. More recent pieces of evidence from the low-income household study make it clear that this is a serious issue: a worker in Pietermaritzburg stays in a township during the month, comes home once, and brings R20 "and food". Two domestics from the same household who work for African employers earn R50 per month between them, of which R40 (a high percentage) comes back. A female worker lives away at a Rainbow Chicken plant and comes home twice a month: she earns R120 per month and brings back R60.³

(ii) Gardens

I have information for the 1981/82 year of agricultural production in gardens on residential sites -which are a potentially important source of real income since most households cultivate them and some are of not insubstantial size - in the region of 0,1 ha and up to 0,3 ha. I studied physical productivity (per unit of land) in the growing of maize, beans and potatoes and attempted to devise direct measurement methods for registering production. Since my emphasis was then on productivity per land unit I did not collect information on other inputs and so I now have difficulties with measuring net income in these activities.

What is interesting is that in the case of maize physical productivity per land unit (or physical yield) is higher than usually thought. For 139 producers in 7 sub-wards I estimate an average yield of 4,2 tons per hectare, whereas one estimate of the average commercial yield for maize in Natal is about 6 tons per hectare. Even excluding 28 possibly unreliable cases, the average yield stays at 3,9 tons per ha.

However, although these yields are high, the value (in money terms, evaluated at official prices) of gross production is in fact quite small - certainly compared to average monthly incomes from employment. I attempted to measure

maize production directly in the gardens of the households of a large sample. For 209 producing households in 7 sub-wards the average production of maize was 216,2 Kg. At the Maize Board 1981/82 selling price of about R135 per ton this average production has a value of R29,19. And this is the gross value of production, and it is not averaged over all households in the sample!

For potato production, I have measurements on 101 households in 4 sub-wards - many of whom are not in the 10% sample. Again the figures are gross of inputs. Mean gross production was 14,99 pockets (15 kgs) per producing household - which at a price of R2,50 per pocket has a value of R37,47. This figure would be at least halved if averaged over all households.

Bean production in gardens was less adequately covered. From 39 observations in Ngubo's subward I derive an average gross production of 33,53 kgs per household - with a value of R37,73 at local prices (1982). Again, netting out the cost of inputs and averaging over all households would reduce the figure further.

(iii) Fields

In 1981 about 17% of households claimed fields, but 27,1% of them reported that in the 1980/81 season they had not cultivated them. (This was a full enumeration of Inadi 2 and 3.) This implies that 12% of households received a contribution to income-in-kind, or sometimes to cash income, from production in fields (or roughly, 1 household in 8). What kind of value are we to put on this contribution?

On the physical side it seems fairly clear that for various reasons yields per unit area are lower than in homestead gardens. Also 'fields' are often quite small and not so much larger than the average garden. One trader, for instance, has 6 fields with a total area of 1,2 ha. Maize which is a low-value crop (per unit of land area) is also the main crop grown.

I have interview data on the use of non-use of fields by 210 households in 5 sub-wards in the 1981/82 season which make it possible to estimate net income from field agriculture. A feature of the figures is the wide dispersion in earnings which relates to the differential impact of frost across localities that season - but also presumably to the dispersion of planting dates (late maize was destroyed by frost in some areas) and perhaps other factors.

Net earnings from field agriculture, Inadi, 1981/82

Subward	Number of producers studied	Average net earnings (nearest R)	Range of net earnings (R)
Ndeleshane	40	R35	-R38 to R180
Noshezi	31	R50	-R4 to R265
Mpande	58	R40	-R120 to R160
Ngubo's	49	R35	-R38 to R688
Shange	32	R121	-R76 to R1412
	<hr/> 210 <hr/>	<hr/> R52 <hr/>	

Not only is average value of output low, but there is a considerable risk of making losses. Clearly there is the possibility, realized by a few, of making substantial profits from farming under these conditions; but in 1981/82 they were very few.⁽⁴⁾ And since we are talking about the low returns to an enterprise undertaken by only 12% of people in the area we are clearly not discussing an important income component. However one would like to know a little more about outliers - how their agricultural incomes fit into the pattern of their overall receipts.

(iv) Cattle and Livestock

We know that in certain areas of KwaZulu the flow of real benefits (essentially meat and milk) from cattle may altogether dominate the net value of crop production.⁽¹⁵⁾ In order to study the precise productivity of cattle-keeping in Vulindlela (and related questions) I have been studying a sample of approximately 150 household-herds over a 12 month period in 1982-83. At this stage checking procedures have been completed for over 100 and 85 have been written up: what follows is based on this sample.

In 1981 20% of households in Inadi owned cattle, with a somewhat higher percentage in the areas further out from town. Herds were small, with mean size 3,5. (On both these counts the situation is very different from that in Mahlabatini).

In the sample of 85 small herds (total 358, growing to 399 during the period) 47 produced milk at some stage in the year (55,3%). We estimate the volume at 12 216 litres which we value at R6108 (50c. per litre). For those producing milk then - something like 10% fo the population of households - this means real income of about R11 p.m. (or R130 p.a.). This is a larger contribution to overall incomes than the product of fields discussed in the previous section.

Meat is more troublesome. Cattle are slaughtered and eaten, and also eaten when they die from natural causes. In our sample year 28 animals served as meat sources - belonging to 19 households. If one values then at R300 each (which is a lowish figure, and adopted because the value of the average beast was close to E320 in August 1982⁽⁶⁾ the value of meat slaughtered for the period is R8400 - which converts to R442 p.a. per household (or R37 per month). For something like 4% of the population of households this could be significant - except that the nature of consumption is such that the benefits are more widely distributed than these figures suggest.

Cattle provide draught-power - used in ploughing and/or cartage. 19 households in the sample used some of their animals to plough and 6 to pull sleds. Although it is not impossible to value these services it is easier to treat the ploughing as a free input to agriculture : the service shows up as increased net value of output in gardens and fields. (The same goes for manure which is almost universally used as a fertilizer). At this stage I shall ignore transport - given its small scale.

Thus far figures have been quoted of gross value - without and deduction (or netting off) of costs. I estimate cost incurred in maintaining herds at a little over R1000 in total.⁽⁷⁾ Since milk and meat grossed R14 508 p.a. in value there is clearly a large margin above cost, and converting-income-in-kind to a net basis would not change the picture much of an income component which on average is small reative to wage-incomes.

(v) Self-Employment, Casual Employment, Small Business ("the informal sector")

It is from this group of activities that it is probable that a significant addition to income from 'formal' wage-employment (usually 'in town') derives. However, although significant, it is probably relatively small. The reason for the tentativeness and caution is that the study of this field of economic activity is very difficult - and, in Vulindlela, incomplete. I do not have good estimates of the frequency with which incomes of this type appear among households; and although I have income-estimates for numbers of operators (including over 150 in near-by Edendale) there is a good deal of uncertainty about them and they show considerable variation - so that more studies are required. It is possible to say something nonetheless.

It may have some value to list what income-earning activities have been encountered thus far. In the field of shelter and housing these are full-time and part-time builders, plasterers, and thatchers; there are mudblock makers (often women usually charging R10 for 100 - and a 'rondavel' will require upwards of 600); many women cut thatch and sell some - though value of sales often seems not to exceed R10 per season; there is at least one concrete-block 'factory'; toilet-pit digging is necessary and often contracted out; women decorate houses with mud and local white-clays for others. In a sample of 90 non-poor households 49 had paid someone to build or construct part of the homestead in the past.

There are several lines of work having to do with clothing. Some knit (with or without machines) jerseys and wollen caps. Others sew a range of dresses and pinafors, bedspreads and decorated pillow-cases (used as gifts) and do clothing repairs. Others buy-and-sell clothing. There are some shoe-repairers. In near-by Edendale (which is wealthier, more settled, closer to town) 14 jersey-knitters reported incomes of R87 per month in 1983 - without deducting capital-charges.⁽⁸⁾ However the work is presumably seasonal - although they tended to deny this. The clothing-makers (ie sewers) in Edendale seem to be in the same income-range, with lower machine-costs.

Small-scale 'subsistence' agriculture does generate some incomes - though most are small. There are men and women who dig and hoe in other peoples' gardens usually for R1-R2 per day during the season. Ploughing is in general contracted out to others who have tractors, oxen, and implements. The tractors by-and-large belong to traders who employ people to do the work, but there are some self-employed tractor-owners who in addition to seasonal ploughing hire out their tractors primarily in the transport of wood. Herdboys are employed on a small scale. In the 85-household sample referred to above 11 hired herdboys for shorter-or-longer periods, but the annual wage-bill was only in the region of R500 plus (in 2 cases) 'school-expenses'.

In so far as the produce of agricultural activity is sold we have already put some value on it in sections (ii) and (iii) above. However there is a trade in foodstuffs and drink, which is by-and-large not a trade in locally-produced food. There are hawkers who sell fresh-fruit and vegetables as well as cooked food: they are most clearly to be seen in their area at major bus-stops and schools. The amount of money spent on bought-lunches by school-children is suprising and a number of hawkers seem to do reasonably well. 45 hawkers in Edendale (a larger market) averaged just over R61 per month in 1983. Liquor has been expanding as a small-scale, localized retailing business during the 1970s. At one stage it appeared to me that something like 10% of households sold liquor - bought at bottle-stores and local depots for the sorghum-beer breweries; I now think this is an overestimate but do not have a firm figure to replace it with. What I think is important is that it seems easy to make R20-R40 per month. With mark-ups of 40c on a 70c bottle of lager you only have to sell a case (12 bottles) per weekend to be making about R5 per week. One presumes these are bad-debt problems and there is evidence that people do drop out because of the difficulty of collecting money owed. However the business is visibly still a flourishing one. At the larger end of the scale incomes are obviously higher. A sample of 11 liquor-sellers in Edendale (ranging from R46,20 p.m. to R960 p.m.) averaged R250 p.m. on our estimates of

mark-ups and turnover. There are also meat-sellers (especially on pension pay-out days) and those (with paraffin fridges) who sell flavoured ice-cubes and cold-drinks in summer.

Of course the formal shops are major purveyors of food and drink. So are the 'tuck-shops' - informal shops in peoples' back-rooms. The traders in general seem to be a local elite, but I have not yet tackled the question of estimating incomes. All I shall mention here is that those known to me are really family-enterprises and that several sons are usually employed in fetching supplies, maintaining vehicles and manning the counters.

Wood-suppliers are crucial in an area such as this, and there is an extensive wood-trade operating at different levels of bulk and scale. The bigger men would appear to do well, judging by the equipment they have purchased over time. They employ locals, both women (usually as collectors) and men; some of the former work for wood alone. I hope that in the course of studies of energy-consumption soon to be mounted, improved knowledge of incomes in this sector will emerge.

In addition to the local resources that are drawn on by builders and wood-suppliers, grass and clay are still worked-up by local craft-workers into mats, containers and pots. The trades however seen residual and do not supply substantial incomes.

In a substantial census-style survey of over 4000 households it emerged that something like 1 in 10 or 11 households owned motor-vehicles of some sort. It is fairly clear that these vehicles are sources of incomes : as yet however the information is not in. In one sub-ward (with low lawholding rates) the main trader-and-tractor-owner grossed R500 ploughing fields in 1981/82; to this would have to be added the take from ploughing gardens. The smaller operators and (one presumes) the transport of passengers are topics for research that still lie ahead. The development of local mechanics and maintenance services seems small.

It appears that paid domestic service has emerged locally. Shopkeepers, teachers, nurses seem to be able to afford R10-R30 p.m. plus food for domestic service. In the area of medical and religious services, these are clearly a number of saupomas, herbalists, and religious men supported by those they serve. The local administration of chiefs and indunas provides a skeletal system of 'induna's police' and at times has small-scale relief funds to spend on road-mending, fencing, etc.

In his paper presented at this Conference,⁽⁹⁾ Julian Hofmeyr, working with the sample of Vulindlela households referred to above, presents revised estimates of average household incomes : the cash aggregate of R76 per week is compiled from wages and salaries (R69) and 'other incomes' R(76). These 'other incomes' are basically what we have been discussing in this section : it is worth noting as a preliminary estimate that they may add 10% to formal wage-incomes.⁽¹⁰⁾

FOOTNOTES

1. See N. Bromberger, 'Some Socio-Economic Aspects of Vulindlela', in N. Bromberger and J.D. Lea (eds), Rural Studies in KwaZulu, Pietermaritzburg, 1982 : Discussion of incomes on pp. 47-50.
2. J.F. Hofmeyr, 'Aspects of the Labour Market Participation Behaviour of Adult Black Males in a Black Peri-Urban Area' : paper presented to the Biennial Conference of the Economic Society of South Africa, Johannesburg, September 1983. Discussion of incomes on p. 6.
3. I summarize some cases from the files of the low-income household survey.
4. It should perhaps be noted that there is some uncertainty over the R1412 figure (and one very similar to it). Both depend on a price for beans (reported by the producers) which is almost three times the normal level.
5. Gaudar and I report this in Paper No. 56.
6. This was established in a survey carried out in September 1982, having retrospective reference to the September 1981 - August 1982 year.
7. Components of costs were : wages (of herdboys); labour rewards of a less regular nature than wages; feed; veterinary medicines; pound and other fines. It is in the nature of this kind of cattle-keeping that money-costs are kept low - primarily by relying on 'free' veld pastures.
8. Knitting-machines may cost R800 new (I am quoting from memory). Monthly instalments reported at R30-R40 impose a substantial cash requirement during the initial 2 years or so of payment. Presumably people who buy them must have other sources of cash-income.

9. Paper No. 123 : the figure quoted here is R76 p.w. - somewhat lower than the figure of R81 p.w. quoted in my paper in section (i).

10. Hofmeyr's! 'other incomes' include wages from casual work in town. This I have not discussed in the text.