

Foreign labour on the South African gold mines: New insights on an old problem

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I. Introduction

In October 1986 the South African Government took an extraordinary political decision, which betrayed a surprising lack of perception about its most important industry – the gold mines. In retaliation for a landmine blast attributed to the proscribed African National Congress, whose activists were purportedly being harboured by Mozambique, it announced without warning that the 60,000 or so Mozambican mineworkers employed in South Africa would be repatriated on the termination of their contracts.

The economic implications of this move appeared to be lost on the Government, which shared the popular view that foreign workers in South Africa are unskilled and easily replaced. But the mining industry, though not able immediately to assess the degree of its dependency on Mozambican workers, knew that it would hurt. The Chamber of Mines, which had not been consulted on the decision, protested against the Government's action and negotiated for its reconsideration. An agreement was reached in December between the Department of Manpower and the Chamber of Mines which effectively rescinded the repatriation order for the more skilled Mozambicans.¹ Significantly, this embarrassing about-face² was forced upon the Government by internal economic realities; it was not intended to mollify Mozambique.

For all its staff and research capacities (a total annual budget of some 350 million rand³), the Chamber of Mines has remarkably little information about labour, the resource on which it is most dependent. Data are available on the number of recruits and their origin but on little else.⁴ It seems astonishing that, in the past, detailed information on miners has been so hard to come by, and even today only the Anglo American Corporation has developed a computerised system of records for its workers. Such information, though limited to one mining house (albeit the largest), now opens up new possibilities for the analysis of mine labour.

This article, based on a study carried out last year,⁵ attempts to present a realistic scenario of the future role of foreign migrants in the South African

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gold mining industry, the country's largest employer of foreign workers.⁶ Taken in conjunction with developments over the past decade or so, the Anglo American labour data are used not only to provide a profile of the contemporary migrant worker but also to demonstrate why the contribution of foreign workers in the near future is likely to decline in both quantity and quality.

Before dealing with the data and their implications, a brief look at certain events that have been instrumental in the emergence of a new form of labour on the gold mines will make it easier to understand the significance of the trends revealed by the data.

II. The changing face of migrant labour on the gold mines

1. The "stabilisation" of the migrant workforce

The nature and dimensions of the migrant labour system have changed significantly in the recent past. It no longer fits the pattern of oscillating migration on which the South African economy – and the mines in particular – had been so heavily reliant for over a century. Contract work was formerly available to almost any foreigner who met fairly lax recruitment requirements⁷ since South African Blacks, who made up only 20 per cent of the mine labour force in 1973, generally eschewed mining in favour of other, more lucrative sectors (which were closed to foreigners). Intervals between a migrant worker's contracts varied from a few months to several years, depending on his financial needs.

The turning-point in the industry's approach to labour was marked by three events: the steep rise in the price of gold in 1973-74; the decision by Malawi in 1974, following an aircraft crash that killed 74 recruits, not to permit recruitment of its nationals by the Chamber of Mines; and shortly afterwards, with the end of Portuguese colonisation, the danger that Mozambican labour might no longer be available.⁸ The higher gold price had some bearing on the sharp increase in mining wages, but the unexpected disappearance of its major source of labour (Malawi provided some 120,000 workers) forced the industry to adopt a policy of "internalisation" by attracting labour from within South Africa with sectorally competitive wages, while reducing its vulnerability to possible further actions by external supplier States.

The onset of a general recession in the mid-1970s, combined with an intensive recruitment drive, induced a much greater labour supply response than anticipated. Consequently, for the first time in the country's mining history, supply far outstripped demand. This enabled the industry to become more selective in hiring and to begin stabilising a hitherto transient and capricious labour force. The stabilisation programme experimented with various types of re-engagement certificates,⁹ which ensured that a miner returned on a new contract within a specified period or risked being replaced

by one of the thousands of new applicants seeking employment on the mines. Novice recruitment dropped significantly and appears to have settled at below 10 per cent of the annual intake.

Miners thus became more career-oriented, not necessarily by choice but for fear of breaking the conditions for re-engagement. The migrant, who once sought work on the mines on a whim or when cash was needed, became a regular employee, returning to his home base on leave. Working conditions (e.g. the single-sex hostel system, the denial of pensions) and terms of service (largely determined by apartheid legislation) nevertheless ensured that workers continued in all other respects to be treated as migrants. The mines of course benefited greatly from a stabilised migrant labour force working, to all intents and purposes, as permanent company employees without the costs that true permanent employees entail.¹⁰

2. The "abolition" of influx control and job reservation

The trend towards the "career miner" model has been accelerated by recent legislative changes. In 1986 much publicity was accorded to the purported ending of control over the flow of foreign migrants through the introduction of various new Acts, the most important being the Abolition of Influx Control Act.¹¹ The significance of this ostensible attempt to dismantle apartheid remains unclear because of the simultaneous application of other laws relating to aliens, squatters and trespassers with a view to ensuring "orderly urbanisation".

The implication for the migrant labour system is that Blacks resident in those areas of South Africa not classed as independent homelands¹² will, in theory, be freer to move since, inter alia, the old "section 10" provisions¹³ will no longer apply. Such legislation appears to make it possible for those mining houses which favour the phasing out of the migrant labour system¹⁴ to treat at least South African Black workers as permanent employees. Perhaps in anticipation of this, some of the major mining houses have started constructing townships for married workers.¹⁵

Another major change of legislation is expected shortly, once the Standing Committee on Mineral and Energy Affairs agrees on the wording of the Mines and Works Amendment Bill, which seeks to repeal the discriminatory clauses of the 1956 Mines and Works Act. This Act constitutes the last remaining legislation denying Blacks access to certain categories of work reserved for Whites. At present the racially determined "scheduled persons" clauses prevent Black workers from obtaining certificates of competency in 13 categories of skilled work, the best known being the blasting certificates, which are predominantly held by White miners.

Positions higher than that of "team leader" in the underground supervisory hierarchy are currently closed to Black miners. In the short run it is not expected that Blacks will surge into higher positions, but one can foresee a gradual replacement of White miners by Black team leaders over

time. As this evolution takes place, at both the supervisory and technical levels,¹⁶ Black workers in these higher categories who are not considered "aliens" will probably be permanently accommodated in married quarters.

3. The political role of foreign labour

From 80 per cent in 1973, the proportion of foreign workers on the mines dropped by half to only 40 per cent in the space of less than ten years.¹⁷ In 1980 the States supplying foreign labour formed the Southern African Labour Commission (SALC) whose objective was to operate as a labour cartel which, by adopting a united stand, could more effectively protect the migrants' interests. During the SALC's earlier meetings much time was spent decrying the evils of the migrant labour system under apartheid and calling for the withdrawal of migrant workers, but without taking any concrete action to that end.

In recent years, it is the South African Government that has taken up the running on the issue of foreign labour. Foreign workers constitute an important political bargaining counter. In 1984 one of the attractions for Mozambique in signing the Nkomati Accord was the prospect of increased mine recruiting.¹⁸ During 1985 various high-level meetings between Mozambique and South Africa were held to formulate a new labour agreement (never signed) and, despite South Africa's flagrant disregard for the Accord, Mozambique continued to hope that the number of Mozambican recruits would increase to pre-independence levels.¹⁹

The sanctions debate brought the issue of foreign workers on to the international stage, and since 1985 the South African Government has repeatedly threatened to repatriate all foreign workers in retaliation against internationally imposed sanctions, culminating in the October 1986 decision to discontinue the employment of Mozambican workers.

4. The rationalisation of recruitment

Not much research has been done on the economics of recruitment but there is evidence that recruiting costs do play an important role in determining labour catchment areas. The expenditures of TEBA (The Employment Bureau for Africa), the recruiting arm of the Chamber of Mines, amounted to approximately R49 million in 1985, or almost R100 per recruit. Although politics and other exogenous factors have been the chief causes of changes in the recruitment pattern, it is significant that in 1973 Mozambique and Malawi supplied more than 53 per cent of the total Black mine labour force and 70 per cent of the foreigners. A decade later they supplied only 12.5 per cent of the total and less than one-third of the foreign component. Lesotho, on the other hand, maintained its contribution over the same period at about 21 per cent. Geographical proximity to the mines is likely to have been an important but largely ignored factor underlying these trends.

A recent detailed analysis of recruitment patterns in Botswana²⁰ has unveiled clearly discernible trends towards the concentration of recruitment activity in areas closest to the mines. More distant and once important recruiting stations have been closed for the simple reason that transport costs have become prohibitive.

One can therefore foresee the gradual eclipse of such supplying countries as Malawi, Mozambique, Swaziland and Botswana, not only for reasons discussed above and below but also on the ground of costs. In this respect a country like Lesotho is favourably situated with respect to the Orange Free State mines.

III. An analysis of migrant worker characteristics

1. The data base

The information drawn from the labour records of the Gold and Uranium Division of the Anglo American Corporation of South Africa relates to the largest of the mining houses, employing almost 37 per cent of all Black gold miners. No other comparable data are available at this stage, but it seems reasonable to regard this information as probably being representative of the gold mining industry. Although Anglo American's current 2 : 3 ratio of foreign to South African workers is the same as the ratio for the total gold mining labour force, it must be noted that policies on the appropriate foreign-domestic labour mix differ noticeably from one mining house to another.²¹

It should also be mentioned that the composition of Anglo American's foreign workers by national origin does not reflect that of the industry as a whole. Table 1 shows how the principal mining houses, for geographical or other reasons, employ disproportionately high numbers of certain nationals. Thus Anglo American employs by far the most Basotho (from Lesotho), while Gold Fields has a considerably higher number of miners from Botswana and Swaziland, and Rand Mines displays a relative preference for Mozambicans and Malawians. In our sample, therefore, we find an over-representation of Basotho workers and comparatively few Malawian and Swazi workers. Nevertheless, there are sufficient numbers from all the major supplier States, with the exception of Malawi, to justify the assumption that the data reflect the whole population of foreign miners.

Most of the Anglo American data related to the month of November 1985, though some statistics were drawn from June 1986. The total number of workers covered (November 1985) was 170,167, of whom 67,467 (39.6 per cent) were foreign workers comprising 47,179 from Lesotho, 12,981 from Mozambique, 4,218 from Botswana, 2,242 from Swaziland and 847 from Malawi. The average number of foreign workers on all the Chamber of Mines gold mines during 1985 was as follows: Botswana 18,079; Lesotho 97,639; Malawi 19,520; Mozambique 50,126; and Swaziland 12,365.

Table 1. Percentage distribution of foreign mineworkers by country of origin and mining house, 31 December 1985

Mining house	Botswana	Lesotho	Malawi	Mozambique	Swaziland
Anglo American	22.6	48.5	4.9	23.6	17.3
Anglo Vaal	3.6	5.2	9.5	9.2	11.0
Gencor	8.6	12.8	24.3	12.5	15.6
Gold Fields	46.7	16.6	16.3	14.4	40.5
JCI ¹	7.5	2.3	4.8	11.9	8.6
Rand Mines	10.9	14.6	40.2	28.4	7.0
Total	100.0	100.0	100.0	100.0	100.0

¹ Johannesburg Consolidated Investments.
Source: Chamber of Mines.

2. Skills

Mining jobs for Blacks are classified by "wage bands" corresponding to the skills and training required. Wage bands 1-8 apply to daily paid workers in both underground and surface production, while band 9 covers all salaried staff ranging from simple clerks to graduate social workers. Skills are acquired through work experience and modular training for specific jobs. Recruits arriving on the mines take various aptitude tests (mental and physical faculties, dexterity, etc.) which, to a large extent, will determine their training and promotion prospects for the rest of their careers. There are more than 400 job categories occupied by Black workers on the mines, of which 35 cover more than 85 per cent of all Black workers.²²

Half the Black workforce is engaged in jobs within wage bands 1-3 (figure 1 and table 2). These jobs generally require little experience (usually not more than six months) and minimal training. By far the largest single group is found in wage band 4, where one-third of the workers are engaged in jobs such as operating different types of underground machinery, drilling and gang supervision. Approximately one year's experience and some formal training (leading to the award of a certificate) are required for these jobs. The higher-skilled supervisory and technical positions such as team leaders and "artisan aides" account for only 11 per cent of the Black workforce and administrative posts for about another 6 per cent. Although comparatively small in number, jobs in wage bands 5-8 are of crucial importance, requiring high aptitude scores, considerable training and several years of experience.

An interesting pattern for production workers is shown in figure 2, which excludes wage band 9. In terms of their percentage contribution to the eight skill levels, an almost symmetrically inverse relationship exists between

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Figure 1. Number of miners in each wage band by origin

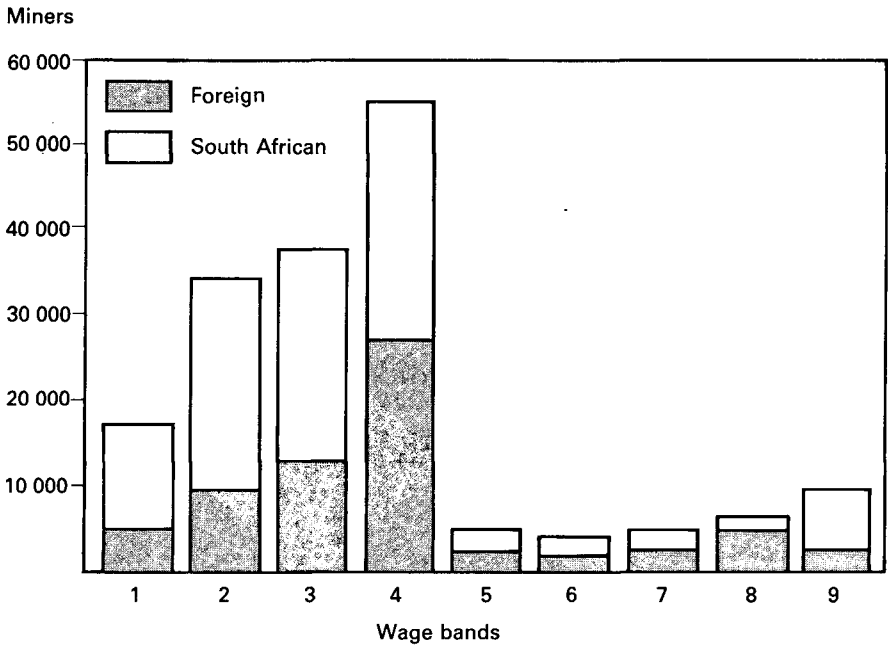


Figure 2. Composition of wage bands by origin

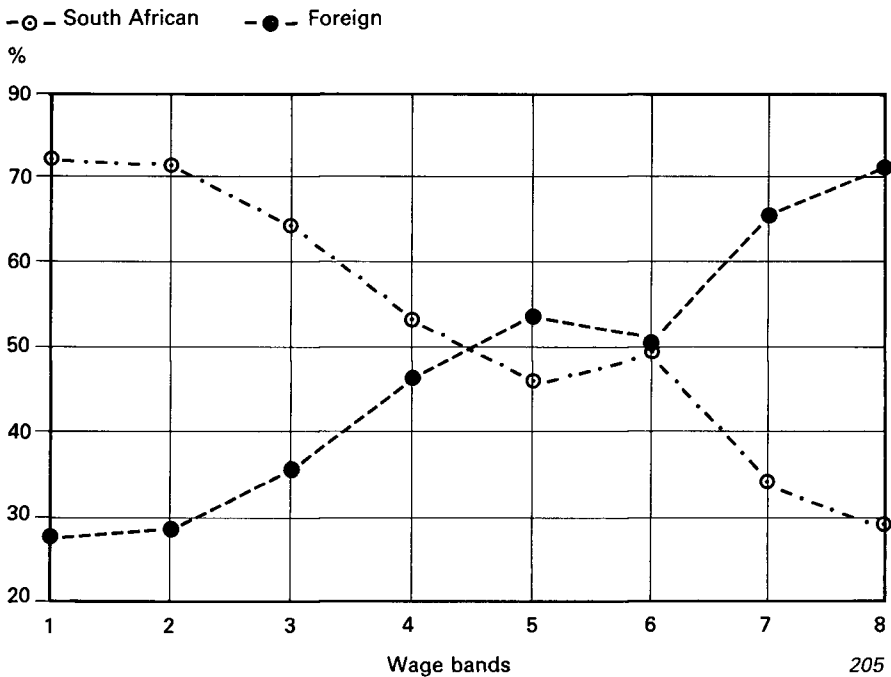


Table 2. Distribution of mineworkers by wage band and by country of origin: Anglo American gold mines, November 1985 (% in parentheses)

Country	Wage band									Total
	1	2	3	4	5	6	7	8	9	
Botswana	220 (5.2)	736 (17.4)	959 (22.7)	1 584 (37.6)	163 (3.9)	56 (1.3)	95 (2.3)	260 (6.2)	145 (3.4)	4 218 (100)
Lesotho	2 553 (5.4)	4 736 (10.0)	8 711 (18.5)	20 612 (43.7)	1 881 (4.0)	1 160 (2.4)	2 230 (4.7)	3 185 (6.9)	2 111 (4.5)	47 179 (100)
Malawi	160 (18.9)	277 (32.7)	141 (16.6)	117 (13.8)	11 (1.3)	10 (1.2)	8 (0.9)	29 (3.4)	94 (11.1)	847 (100)
Mozambique	1 666 (12.8)	3 667 (28.2)	2 518 (19.4)	2 219 (17.1)	445 (3.4)	776 (6.0)	547 (4.2)	858 (6.6)	285 (2.2)	12 981 (100)
Swaziland	142 (6.3)	341 (15.2)	523 (23.3)	1 024 (45.7)	34 (1.5)	39 (1.7)	18 (0.8)	22 (1.0)	99 (4.4)	2 242 (100)
Total foreign	4 741 (7.0)	9 757 (14.5)	12 852 (19.0)	25 556 (37.9)	2 534 (3.8)	2 041 (3.0)	2 898 (4.3)	4 354 (6.5)	2 734 (4.0)	67 467 (100)
Total South African	12 139 (11.8)	23 905 (23.3)	23 006 (22.4)	29 004 (28.2)	2 203 (2.1)	2 006 (2.0)	1 510 (1.5)	1 804 (1.8)	7 123 (6.9)	102 700 (100)
Grand total	16 880 (9.9)	33 662 (19.8)	35 858 (21.1)	54 560 (32.1)	4 737 (2.8)	4 047 (2.4)	4 408 (2.6)	6 158 (3.6)	9 857 (5.8)	170 167 (100)

Source: Anglo American Corporation.

foreign and South African workers. At the lowest skill level South Africans outweigh foreigners by a ratio of more than 7 : 3, while in the highest skill category foreigners outnumber South Africans in the same proportion. In all wage bands (except 6 where the proportions are evenly split) the share of foreigners increases, to the extent that they dominate wage bands 5, 7 and 8. The preponderance of foreigners in the higher skill brackets is not surprising, considering that until 1977 they outnumbered South African miners.

Regarding wage band 9, i.e. that of salaried employees, a different situation arises, reflecting the mining industry's move towards internalisation and stabilisation. Black salaried mining personnel can be presumed to be more career-oriented than many of the daily wage workers and therefore more likely to think of their work on the mines in permanent terms. The mining houses do not hide the fact that South Africans will be given preference for what are seen as long-term jobs, e.g. in administration and skilled production. Consequently, foreigners fill only about one-quarter of the salaried positions. Most of the South African employees in this wage band are recruited from the Transvaal, reflecting both its proximity and the existence of a larger pool of educated Black jobseekers there.

3. Length of service

An analysis by length of service (table 3) provides perhaps the most revealing insight into the likely future composition of the Black workforce. This variable allows a much more dynamic interpretation of changes taking place within the reported annual stocks of recruited workers than has been possible hitherto.

Following the introduction of the stabilisation measures and the subsequent low intake of novices (see section IV below), one finds that the majority of miners have had considerable work experience on the mines, the model cohort for both foreign and South African miners having between five and ten years' service (figure 3). Almost two-thirds of foreign workers fall in this cohort as against just over half the South Africans. A notable feature of a miner's work cycle is that very few continue to work after ten years of service.²³

The highly skewed distribution of foreign workers by length of service suggests that rapid attrition can be expected in the next five years, even if the stabilisation policy and the trend towards the "career miner" result in longer service than indicated by the past data. With the imminent departure of the longest-serving foreign workers, the fact that the next largest category (those with between two and five years' service) is heavily dominated by South Africans suggests that recent recruitment policy has been designed to reduce the current dependence on foreign skilled workers, and hence the mines' vulnerability to government-imposed repatriation or externally initiated withdrawal. In future, it seems, foreigners will be hired mainly for unskilled and semi-skilled jobs where they could be easily replaced through local recruitment if necessary.

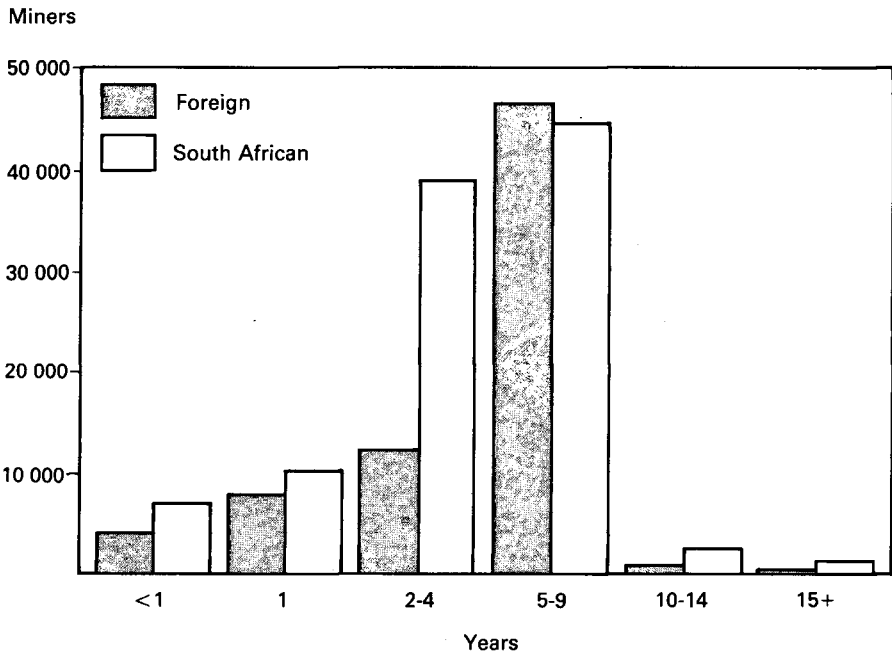
Table 3. Length of service of mineworkers by country of origin : Anglo American gold mines, June 1986 (% in parentheses)

Country	Length of service												
	1 year		1 year		2-4 years		5-9 years		10-14 years		15+ years		Total
Botswana	404	(8.4)	499	(10.4)	933	(19.4)	2 843	(59.0)	125	(2.6)	11	(0.2)	4 815 (100)
Lesotho	1 696	(3.4)	2 203	(4.4)	8 311	(16.8)	36 248	(73.1)	804	(1.6)	295	(0.6)	49 557 (100)
Malawi	33	(3.6)	374	(41.3)	203	(22.4)	290	(32.0)	2	(0.2)	4	(0.4)	906 (100)
Mozambique	1 329	(9.2)	4 382	(30.3)	2 223	(15.4)	6 513	(45.1)	2	(0.0)	0	(0.0)	14 449 (100)
Swaziland	809	(26.7)	293	(9.7)	1 235	(40.7)	669	(22.0)	23	(0.8)	5	(0.2)	3 034 (100)
Total foreign	4 271	(5.9)	7 751	(10.7)	12 905	(17.7)	46 563	(64.0)	956	(1.3)	315	(0.4)	72 761 (100)
Total South African	7 121	(6.7)	10 311	(9.7)	39 583	(37.3)	44 923	(42.3)	2 942	(2.8)	1 333	(1.3)	106 213 (100)
Grand total	11 392	(6.4)	18 062	(10.1)	52 488	(29.3)	91 486	(51.1)	3 898	(2.2)	1 648	(0.9)	178 974 (100)

Note: Total of all periods of employment with Anglo American, which may be separated by more or less lengthy intervals.

Source: Anglo American Corporation.

Figure 3. Length of service of miners by origin



4. Age

Table 4 and figure 4 portray the age distribution of mineworkers. A similar but even more pronounced contrast to that of length of service is apparent. The distribution of foreign workers is skewed towards the higher age groups, with the mode (41.6 per cent) lying within the 30-39 year cohort, whereas the South African workers are heavily skewed towards the lower age brackets, the mode (55.2 per cent) being between 20 and 29 years of age.

As with length of service, the noticeable difference in age distribution reflects the mining industry's policy of looking for new labour catchment areas within South Africa. This is evidenced in the regional breakdown of recruits, which shows higher proportions of younger miners in relatively newer areas of recruitment, such as the Orange Free State, Bophuthatswana and KwaZulu (which for the age cohort 20-29 are 68.8, 62.1 and 59.4 per cent respectively) than in the more traditional recruitment areas within South Africa such as the Transkei (50.3 per cent) and Ciskei (45.3 per cent).

Older miners will generally be more experienced, which explains why a much higher proportion of foreign workers than South Africans are aged 30-39 (41.6 versus 28.7 per cent). The same applies to all subsequent age cohorts, where the proportion of foreigners is more than double that of South Africans.

Figure 4. Age distribution of miners by origin

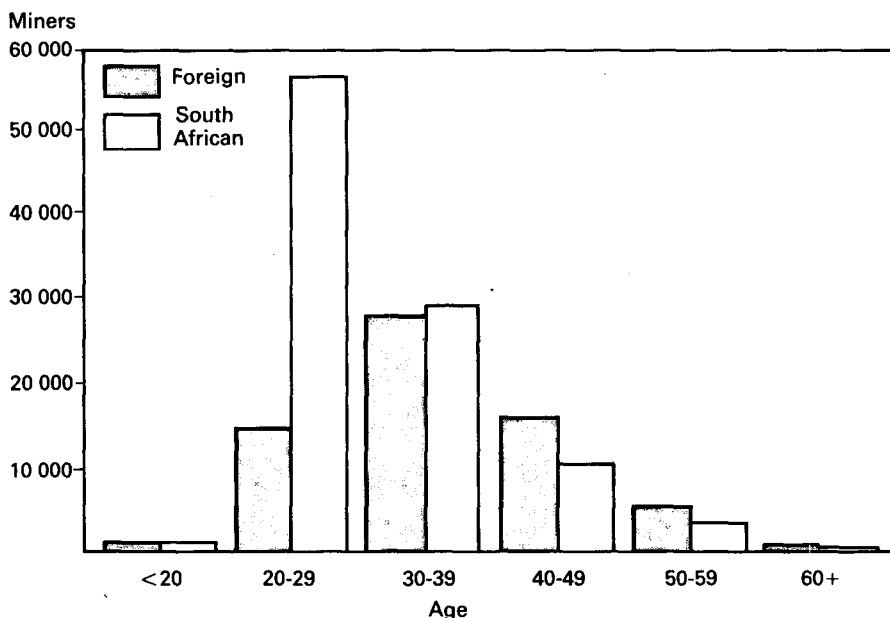


Table 4. Age distribution of mineworkers by country of origin: Anglo American gold mines, November 1985 and June 1986 (% in parentheses)

Country	Age						Total
	20 years	20-29 years	30-39 years	40-49 years	50-59 years	60+ years	
Botswana	4 (0.1)	1 443 (34.1)	1 913 (45.2)	719 (17.0)	139 (3.3)	11 (0.3)	4 229 (100)
Lesotho	1 218 (2.6)	10 977 (23.2)	19 921 (42.1)	11 069 (23.4)	3 567 (7.5)	527 (1.1)	47 279 (100)
Malawi	4 (0.5)	97 (11.4)	398 (46.9)	266 (31.4)	73 (8.6)	10 (1.2)	848 (100)
Mozambique	99 (0.8)	2 017 (15.5)	5 041 (38.7)	3 955 (30.4)	1 668 (12.8)	231 (1.8)	13 011 (100)
Swaziland	4 (0.2)	1 068 (47.6)	842 (37.5)	268 (11.9)	55 (2.5)	7 (0.3)	2 244 (100)
Total foreign (November 1985)	1 329 (2.0)	15 602 (23.1)	28 115 (41.6)	16 277 (24.1)	5 502 (8.1)	786 (1.2)	67 611 (100)
Total South African (June 1986)	1 365 (1.3)	56 712 (55.2)	29 445 (28.7)	11 132 (10.8)	3 478 (3.4)	517 (0.5)	102 649 ¹ (100)

¹ Missing values = 1,429.

Source: Anglo American Corporation.

Table 5. Level of education of mineworkers by country of origin: Anglo American gold mines, November 1985 (% distribution within country is shown in parentheses)

Country	Level of education											
	None	Grade ½	Std 1	Std 2	Std 3	Std 4	Std 5	Std 6	Std 7	Std 8	Std 9	Std 10
Botswana	1 411 (32.9)	810 (18.9)	429 (10.0)	224 (5.2)	186 (4.3)	197 (4.6)	198 (4.6)	169 (3.9)	525 (12.2)	64 (1.5)	39 (0.9)	40 (0.9)
Lesotho	11 343 (23.8)	3 126 (6.5)	4 563 (9.6)	5 178 (10.8)	4 815 (10.1)	4 956 (10.4)	3 690 (7.7)	3 122 (6.5)	3 064 (6.4)	1 367 (2.9)	1 664 (3.5)	850 (1.8)
Malawi	66 (7.6)	59 (6.8)	48 (5.5)	84 (9.6)	111 (12.7)	78 (8.9)	96 (11.0)	66 (7.6)	75 (8.6)	166 (19.0)	13 (1.5)	11 (1.3)
Mozambique	2 691 (20.9)	795 (6.2)	985 (7.6)	2 089 (16.2)	2 632 (20.4)	2 487 (19.3)	520 (4.0)	444 (3.4)	134 (1.0)	63 (0.5)	35 (0.3)	10 (0.1)
Swaziland	323 (14.8)	259 (11.9)	245 (11.2)	275 (12.6)	176 (8.1)	163 (7.5)	258 (11.8)	39 (1.8)	95 (4.4)	120 (5.5)	169 (7.7)	61 (2.8)
Total foreign	15 834 (23.3)	5 049 (7.4)	6 270 (9.2)	7 850 (11.5)	7 920 (11.6)	7 881 (11.6)	4 762 (7.0)	3 840 (5.6)	3 893 (5.7)	1 780 (2.6)	1 920 (2.8)	972 (1.4)
Total South African	14 672 (14.3)	3 589 (3.5)	7 979 (7.8)	10 560 (10.3)	11 115 (10.8)	12 940 (12.6)	15 428 (15.0)	10 328 (10.1)	6 344 (6.2)	4 874 (4.8)	2 354 (2.3)	2 362 (2.3)
Grand total	30 506 (17.9)	8 638 (5.1)	14 249 (8.4)	18 410 (10.8)	19 035 (11.2)	20 821 (12.2)	20 190 (11.8)	14 168 (8.3)	10 237 (6.0)	6 654 (3.9)	4 274 (2.5)	3 334 (2.0)

Source: Anglo American Corporation.

5. Education

Another notable feature distinguishing local and foreign recruits is their level of education. Partly reflecting the fact that older miners tend to be less educated than new recruits, foreign workers are, on average, found to be considerably less educated than their South African counterparts. From table 5 one will note that almost one-quarter (23.3 per cent) of the foreign miners do not have any education (compared with 14.3 per cent for South Africans) and that the proportions of those with low levels of education (up to standard 3) are higher for foreigners, while South Africans are proportionately better represented at all educational levels from standard 4 on, with the exception of standard 9.

The typical recruit is now more educated than were his predecessors. To some extent this is attributable to the mining industry being more selective because of the surplus labour situation, the greater availability of education and the higher educational demands of increased mechanisation.

IV. Projections of foreign labour on the gold mines

If one assumes, as is implied in table 3 and figure 3, that most miners will continue to drop out of the industry after ten years of service, a projection of the likely future contribution by foreign workers can be made. Unless a significant change in working patterns emerges, one can predict that during the next five years almost two-thirds of the current stock of workers are likely to leave the Anglo American gold mines.²⁴ Furthermore, assuming a foreign novice intake based on the proportion of those with less than one year of service (2.4 per cent of the total workforce) and that *all* other foreign workers remain on the mines over the next five years, the most optimistic forecast would give foreign workers a 26 per cent share of the total workforce.

It is impossible to make an accurate prediction of future novice intakes, but past trends provide some clues. Prior to the disruption caused by the withdrawal of Malawian labour, the novice recruitment rate hovered around 20 per cent of total recruitment. In the mid-1970s the novice intake soared to more than 40 per cent but, since stabilisation, appears to have settled at slightly under 10 per cent. Information on foreign novice recruitment has been made available only from 1978 but the trend supports the view that foreign workers are being phased out of the system, or at least reduced. From table 6 we note that foreign novices have generally formed under 20 per cent of total novices – well below the minimum of 40 per cent needed just to maintain the current level of foreign workers.²⁵ More significantly, foreign novices as a percentage of total recruitment dropped from 2.6 per cent in 1978 to 1.2 per cent in 1983, rising to 2.4 per cent in 1985 (the increase in the percentage of foreign novices in 1984 and 1985 being largely due to increases in the number of Mozambican novices following the Nkomati Accord).

Table 6. Recruitment for member mines of the Chamber of Mines (gold, platinum, copper, lead and coal mines)

Year	Total recruitment	Foreign	% foreign	Novices	South African novices	Foreign novices	Foreign novices as % of total novices	Foreign novices as % of total recruitment
1978	455 721	205 410	45.1	68 960	56 924	12 036	17.5	2.6
1979	478 559	205 410	42.9	56 233	45 138	11 095	19.7	2.3
1980	483 462	202 939	42.0	67 149	57 271	9 878	14.7	2.0
1981	480 188	193 594	40.3	64 879	55 051	9 828	15.1	2.0
1982	473 477	195 467	41.3	65 364	54 088	11 276	17.3	2.4
1983	483 348	192 942	39.9	50 265	44 279	5 986	11.9	1.2
1984	506 180	201 764	39.9	53 239	43 914	9 325	17.5	1.8
1985	536 009	220 578	41.2	50 699	37 849	12 850	25.3	2.4
1986 ¹	38 804	28 102	10 702	27.6	...

¹ January-October.

Source: Chamber of Mines.

Assuming (i) that there will be no growth in the gold mining industry over the next five years, (ii) that all miners currently with five to ten years' service will have left the mining industry after five years, (iii) that all other workers remain in the industry, and (iv) that the Anglo American data are representative of the gold mining industry, the following projections can be made. If we start with an optimistic foreign novice intake of 3 per cent of the total workforce, foreigners would comprise 29 per cent of the total after five years; at 2 per cent, their contribution would drop to 26 per cent; and at 1 per cent it would be only 19 per cent. One can therefore reasonably expect that foreign workers will only account for between 19 and 29 per cent of all workers on the gold mines within five years. In other words, the gold mining industry will have conceivably reversed its labour composition from a foreign-South African ratio of 4 : 1 in the early 1970s to 1 : 4 by the early 1990s.

V. Implications for migrant-supplying States

In the report we submitted to the SALC in September 1986 we predicted that large-scale repatriation of foreign workers at short notice was unlikely because of the mines' heavy dependence on foreign labour, particularly in the higher-skilled positions. A few weeks later the South African Government defied rationality and announced the repatriation of all Mozambican workers. However, as we have already explained, by December the decision was partially reversed so our prediction was largely vindicated.

For all the international publicity accorded to the threatened repatriation of foreign workers, there is little economic justification for believing that any more moves of this sort are imminent. This is not to suggest that irrational decisions will not recur (as they have so often in the past) and that contingency plans should not be prepared. However, a more realistic and direct approach should be considered. Migrant-supplying countries should rather prepare for the eventual phasing out of their workers who, within five years or so, may contribute as little as one-fifth of the mining industry's labour force.

This does not mean they should adopt a defensive policy on the migrant worker problem, however. One important aspect which tends to be overlooked, but which has been underscored by the Mozambican repatriation debacle, is that the SALC countries, though supplying only 40 per cent of the labour, control a large majority of workers in critical skill categories. The SALC therefore still wields a very strong but rapidly weakening clout. Over the next few years the SALC's bargaining position will be eroded, not only because fewer foreign workers will be needed, but also by the fact that South Africans will soon dominate the higher skill categories while, given the changing legal status of many South African Black workers, migrant workers are likely to be confined to the lower skill categories. If the SALC were to consider negotiating recruitment quota agreements in order to relieve the

Table 7. Estimated numbers of foreign mineworkers, by country of origin, in wage bands 4-9 of the gold mining industry

Country	Wage band					
	4	5	6	7	8	9
Botswana	7 603	782	269	456	1 248	696
Lesotho	45 346	4 138	2 552	4 906	7 007	4 644
Malawi	2 200	207	180	150	545	1 767
Mozambique	7 544	1 513	2 638	1 859	2 917	969
Swaziland	5 939	197	226	104	127	574
Total	68 632	6 837	5 865	7 475	11 844	8 650

Source: Based on extrapolations from Anglo American Corporation data.

growing domestic unemployment problem by stabilising and prolonging external employment, it would have to act soon.

Another neglected issue is the alternative use to which the skills acquired by mineworkers might be put. On the assumption that the Anglo American data are representative of the gold mining industry as a whole, extrapolations have been made for the number of workers from each country who fall within wage bands 4-9 (table 7). Some 110,000 foreign miners occupy jobs that can be considered at least semi-skilled, while about 41,000 hold jobs which are fairly skilled (wage bands 5-9). If past trends continue, many of these men will leave the mining industry in their forties. On returning home, they will either take up agricultural activities or find employment which fails to exploit their potential. Their skills will be dismissed as irrelevant. An examination of job descriptions suggests otherwise: given minimal training to redirect their skills, mineworkers constitute an enormous resource which can be productively channelled into the domestic economy.

The prospect of significant reductions in the recruitment of foreign workers will not be welcomed by some migrant-supplying States but, when the new data are seen in conjunction with the process of rationalisation taking place on the mines, that development seems all but inevitable. Labour catchment areas are inexorably shrinking under the pressure of political and economic circumstances. By increasing the number of South African workers the mines are not only protecting themselves from the vagaries of a politically volatile region but are acquiring a more stable and cheaply recruited labour force. Political expedience, growing union pressures, spreading hostel violence and the opening of career opportunities all point to significant imminent changes in the migrant labour system. As legislative controls over the movement of domestic labour are reduced, the foreign migrant, subject to stricter immigration laws, will become progressively redundant.

Notes

¹ Details of the revised repatriation order are given in a letter from the Director-General of Manpower to the Chamber of Mines. The new arrangement provides, inter alia, that (i) Mozambican workers in wage bands 4-8 (higher-skilled jobs) will be allowed to renew their contracts; (ii) workers in wage bands 1-3 with more than seven years' service will also be able to renew their contracts; (iii) mines where Mozambicans make up more than 20 per cent of the workers in wage bands 1-3 can phase out the Mozambicans over a period of three years; and (iv) special cases such as paraplegics can be retained on compassionate grounds (*Weekly Mail* (Johannesburg), 16-17 Jan. 1987).

² Embarrassing for the Government since the negotiations with the Chamber of Mines were supposed to be highly confidential. Details of the new agreement nevertheless leaked out to the press a few weeks afterwards.

³ 1 rand (R) = approximately US\$0.50.

⁴ The Human Resource Laboratories of the Chamber of Mines have carried out a number of attitudinal and behavioural studies and for several years a monitoring programme was also undertaken, based on a sample survey of various labour force characteristics, but this has since been discontinued.

⁵ F. de Vletter: *A comparative analysis of skills and other characteristics of foreign mineworkers on the South African gold mines: A case study of the Anglo American gold mines*, Paper commissioned by the ILO Southern African Team for Employment Promotion (SATEP) for presentation at the Eighth Meeting of the Southern African Labour Commission, Blantyre, September 1986.

⁶ Official statistics show that on 30 June 1986 there were 378,125 registered (i.e. legal) Black migrant workers in South Africa. Of these only 8,117 were women. Of the male migrant workers, 317,441, or 86 per cent, were employed in the mining and quarrying sector (Republic of South Africa, Department of Co-operation and Development: *Registered Black migrant workers and commuters in White areas, 30 June 1986*, Johannesburg, 1986). Data supplied by the Chamber of Mines indicate that the number of foreigners employed on all its members' mines (the vast majority being gold mines) in December 1985 was 220,578, or 40 per cent of their total Black workforce.

⁷ Any prospective recruit without obvious physical defects, weighing not less than 50 kg and aged 18 or over, could sign up. However, if he failed to pass a cursory medical examination in his home country or a more thorough examination at one of the South African transit depots (including heartbeat, X-ray and blood tests), he would be rejected.

⁸ W. R. Böhning (ed.): *Black migration to South Africa: A selection of policy-oriented research* (Geneva, ILO, 1981).

⁹ TEBA (the recruiting agency for the Chamber of Mines) currently offers four types of re-engagement certificates: the TEBA 460 Re-employment Guarantee Certificate (26-45 weeks' service); the TEBA 461 Re-employment Guarantee and Early Return Bonus (minimum 45 weeks' service); the TEBA 459 Stabilisation Certificate; and the TEBA Certificate of Leave of Absence. The first two ensure that a miner, on returning within two or six months respectively, will be re-employed in a similar occupation to that which he left on discharge, provided there is a vacancy. If there is no vacancy he will be entitled to a rate of pay determined by the mine until a similar occupation becomes available. The TEBA 461 also entitles the worker to an early return bonus based on his period of service. The use of these two types of certificate appears to be declining. The TEBA 459, like the first two, is related to length of service, but with this certificate, in order to allow for better manpower planning, a predetermined date of return is negotiated between the mine and the worker. As paid leave increasingly becomes a standard condition of employment, the leave certificate is coming into more general use. Foreign migrants returning to the mines after leave are required by law to be issued with new contracts.

¹⁰ Since its formation in 1982 the National Union of Mineworkers has secured remarkable improvements in the conditions of service of all workers, including migrants, in such areas as wages, safety and leave.

¹¹ In very general terms, the implications of the new legislation are as follows: (i) Blacks resident in "White South Africa" and the "self-governing" homelands will no longer need any formal exemption or permission to live in an urban area; (ii) employers will be able to engage whom they wish; (iii) Blacks will be able to bring their families to where they are living or working; and (iv) the notorious "pass", issued exclusively to Blacks, will be replaced by identity

cards issued to South Africans of all racial groups. It is important to note that citizens of the homelands will be treated as aliens under the Aliens Act and will continue to work in "White South Africa" under short-term contracts as foreign migrants.

¹² The "independent homelands" of South Africa comprise Bophuthatswana, Ciskei, Transkei and Venda. About one-fifth of South African Blacks live in these four homelands, and judging from the Anglo American labour data, about 61 per cent of all South African Black mineworkers are recruited from them. These workers are not counted as foreign for the purposes of this article.

¹³ Section 10 of the Black (Urban Areas) Consolidation Act, 1945, allowed Black workers to reside permanently in an urban area if they worked there continuously for one employer for ten years or for several employers for 15 years. Legislation adopted in 1968 made the attainment of section 10 rights impossible for migrants as they were compelled to return to their homelands every year and reapply for their jobs through the labour bureau.

¹⁴ Events over the past few years, especially increased violence among mineworkers during 1986, have forced at least some of the more liberal mining houses to reconsider the migrant labour system. In response to a spate of "faction" killings, the Anglo American Corporation, in a recent full-page newspaper advertisement (e.g. in *The Citizen* (Johannesburg) on 5 January 1987), drew public attention to some of the problems inherent in this unnatural system.

¹⁵ The provision of married housing for Black workers has remained static at about 1.5 per cent of the total Black labour force, but officials from one mining house state that its new housing programme aims to accommodate some 20 per cent of the workforce. The mining industry is also conducting market research testing mineworker response to possible home purchase schemes.

¹⁶ Following the labour reforms introduced in the early 1980s, restrictions hitherto imposed on the access of Blacks to technical training were lifted. The mines started training Black artisans about three years ago but they still form a small minority of trainees. Of some 1,600 apprentices at the Anglo American Corporation, 158 are Black, the first having graduated in 1985 (personal communication to the author). That Black team leaders are already *de facto* taking over the responsibilities of White miners was shown by J. P. Leger: "Safety and the organisation of work in South African gold mines: A crisis of control", in *International Labour Review*, Sep.-Oct. 1986.

¹⁷ For a detailed account of factors affecting the change in foreign labour supplies see F. de Vletter: "Recent trends and prospects of Black migration to South Africa", in *Journal of Modern African Studies* (Cambridge), Dec. 1985, pp. 667-702.

¹⁸ The war-ravaged and economically crippled Frelimo regime in Mozambique had little choice but to sign what amounted to a non-aggression pact that initially held some promise of peace and economic recovery. It was widely hoped that more Mozambicans would be employed in the South African economy as a result of the Accord. The recruitment of miners is particularly important for the Mozambican economy, contributing approximately one-third of the country's foreign exchange earnings. Miners receive only 40 per cent of their earnings while in South Africa. The remainder is transferred to Mozambique in rands and is later returned to them in local currency.

¹⁹ It is reported that soon after the Nkomati Accord in 1984, the South African Prime Minister attempted to pressure the Government of Lesotho into signing a similar non-aggression pact by indicating that South Africa was seriously considering, *inter alia*, reducing the number of Basotho mineworkers from more than 100,000 to 65,000 (personal communication to the author).

²⁰ John Taylor: *The pattern and consequences of declining mine labour recruitment in Botswana* (Geneva, ILO, 1986; mimeographed International Migration for Employment working paper; restricted).

²¹ While the mining houses appear to have different general policies on this question, it is said that each individual mine is free to hire workers from wherever it wishes. In the early 1980s the Gold Fields mining group tended to split the labour force evenly between South African and foreign workers, Anglo American and Rand Mines had a 3 : 2 ratio, while Gencor – with a 4 : 1 weighting – is attracting as much labour as possible from the homelands on the principle that "charity begins at home" (*Rand Daily Mail* (Johannesburg), 1 May 1984).

²² See the appendix in de Vletter, *op. cit.* (1986), for full descriptions of the 35 most common mining jobs.

²³ The sudden drop in the number of miners after ten years of experience is somewhat puzzling in that there is no mechanism used by the mines to force workers out of the industry after a certain period. Provided miners pass physical and medical examinations, they can continue working on the mines, irrespective of age.

²⁴ It should be noted that, because the effects of the stabilisation measures introduced in 1977 may not have fully worked their way through the work cycle of the new type of "career" miner, one may well find that many miners will stay on for much more than ten years. This tendency, in terms of the projections, will be counterbalanced to some extent by the number of miners who leave well before completing ten years' service.

²⁵ Even if the foreign novice intake were as high as 40 per cent, this would not maintain the proportion of foreign workers at 40 per cent (at least in the short run). This is due to the skewed distribution of workers in the five to ten year length-of-service cohort, which will result in a high rate of attrition over the next five years or so.

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