

# International Aid to HRH development in Ethiopia: Assessment of Irish Aid investment in the development of human resources for health in Southern Nations, Nationalities and Peoples Region (SNNPR)

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## Abstract

**Background:** Human resources for health (HRH) are considered the linchpin in health development but, until recently, donors were reluctant to support HRH development considered as higher education and not a priority for support. There have been changes in this attitude in the last few years. The evolution in Ethiopia is explored using the experience of Irish Aid (IA) as a case study.

**Methods:** The evolution of HRH in SNNP is explored through study of IA and Regional documents and interviews of key informants, focus group discussions and field visits in the region.

**Results:** Major national initiatives with short and long term impact on HRH are briefly documented including the 'flooding strategy', the Accelerated Health Officers Training and the rapid deployment of health extension workers (HEW). Major constraints/uncertainties in improved IA support are noted including absence of specific HRH policy and an outdated health policy; delays in the development of an HRH strategy; impacts of over-drawn BPR process... IA impacts on HRH in the region, including middle level HRH training; training of HEW, in-service training in general..., are commendable. The assessment also documents current weaknesses/gaps in IA support including lack of training needs assessment, weak supportive supervision, lack/delay in upgrading training - for HEW in particular, lag in training to clear the backlog of junior categories and inadequate increase of HRH for Emergency Obstetric Care. Adequate measures have not been taken to improve quality of pre-service training; improve motivation, efficiency and retention of the health workforce (HWF) and strengthen HRH management.

**Conclusions and Recommendations:** Overall, IA had discernable impact on HRH development in the region. Areas for future policy level dialogue and improved impact are recommended. [*Ethiop. J. Health Dev.* 2013;27 Special Issue 1:29-35]

## Introduction

In Ethiopia, as all over the world, human resources for health (HRH) are considered the linchpin in health development. However, the HRH crisis the country is facing remains an important concern in health service delivery. The crisis is multifaceted: health workforce (HWF) density is very low; management, efficient use and retention of existing HRH is problematic; the HWF mix is questionable; production of the required HWF is dismally slow. These problems are predicated on issues such as the size, composition and distribution of the health care workforce, workforce training, the migration of health workers, the level of economic development of the country and socio-demographic, geographical and cultural factors (1-3).

In response to this crisis, Ethiopia, along with a number of other countries (4), has tried various alternative approaches including physician substitute categories of health workers, such as Health Officer (HO), nurse practitioner, health assistant and health extension worker [HEW] (5-7); and a highly accelerated program for the training of all HWF, in particular HO and the new HEW (8, 9).

There has also been an accelerated expansion of health facilities which has exacerbated the situation by creating

major gaps in terms of adequate number and quality of personnel for training, services provision, research and management at all levels. The crisis has been compounded by global pull factors (brain drain), so much so that the region and the country have seen decreases in absolute numbers of highly qualified health workers in recent years (10-12).

Until recently, donors were reluctant to support HRH development which was considered as higher education and therefore not a priority for support (13, 14). There have been changes in this attitude in the last few years and the evolution in Ethiopia is explored using the experience of Irish Aid (IA) as a case study.

Ethiopia has, in recent years, evolved from a low external donation recipient to a major one (15). However, there have been a number of issues related to reliability of donor funds, conditionalities as related to governance in particular, absorption capacity exacerbated by multiple and differing accounting and reporting requirements (10).

SNNP has a very complex history with ephemeral ties between SNNPR and the core highland state over long periods (16, 17). It has a population of 15,745,000 and is the third largest region in the country with 20.3% of the

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total population. The sex ratio (male: female) is 99:100 and the population grows by 2.9% annually. At only 10% urban, compared to the national average of 16%, it is the least urbanized of the Ethiopian regions (18).

In accordance with the decentralization process implemented since the early 2000s and in view of the ethnic complexity of the region, it is structured into Zones and Special Woredas with elected councils and officials accountable directly to the Regional Council. Accordingly, these zones and woredas are supposed to be highly autonomous with devolution of power also to the kebele (village) level.

The region has some 52 ethnic groups (according to the Regional Nationalities Office, more for CSA) and is divided into 13 zones and 11 special woredas (SWs), and total 134 woredas (including SWs). Special woredas have the status of Zones because of special socio-political and economic needs. Zone populations range from about 50,000 in Basketo to almost 3 million in Sidama. The area of Zones also varies widely from some 23,000km<sup>2</sup> for Bench Maji to 500km<sup>2</sup> for Siliti (19).

As in most major regions in the country, enrolment in primary and secondary schools has grown substantially, by over 225% from 1995/6 to 2005/6. However, girls' enrolment is not only low compared to boys in the region, but relatively lower than in most other major regions of the country even though, encouragingly, it seems to be growing faster than for boys. Overall, this translates into a low level of educational attainment in the region for women in particular (20).

IA has been involved in HRH in SNNP since 1994, initially in selected zones and, in 2002, a shift from project funding to region-wide integrated budget support. The objectives of the current assessment were:

- To measure the contribution of Irish Aid's investment in human resource development in SNNPR, and document lessons learned;
- To assess HRH challenges in SNNPR, identify gaps and forward recommendations for policy dialogue to maximize future support to HRH at national and sub-national level.

### Methods

The assessment was carried out in November and December 2009. To address the complexity of the assessment which comprised of the programmatic region-wide nature of the support, and assessment of both achievements and future needs in the rapidly changing Ethiopian health sector, the team examined HRH through a variety of approaches including review of the scientific literature, analysis of Irish Aid guidance and other documents, national & regional plans, regional reports, analysis of data on HRH in the region from Irish Aid and other development partners, and discussions with Irish Aid, the SNNP Regional Health Bureau (RHB) and selected Zone and Woreda staff.

Desk study was a major part of the assessment and a large number of documents were reviewed (for list of documents reviewed see 21). Records were reviewed in all administrative offices and facilities visited and included the Regional HRH database recently set up, staffing patterns, service targets achieved, performance appraisal forms, training reports.

Key informant interviews were conducted with purposively selected individuals including health managers and staff in the RHB, two Zone offices, two woreda offices, two health centers, two health posts, one government hospital, one NGO clinic and one private hospital. Irish Aid advisors were also interviewed. Interviews were frequently held with several respondents together, to save time and to allow discussion of topics (for list of respondents see 21). General discussions were also held, usually following interview questions. Focus Group Discussion was held with the senior staff of Hawassa Health Sciences College and one short questionnaire was sent with the help of the Regional Human Resources Process Owner (HRPO) to a small sample of recently upgraded staff, as it was not possible to meet them for discussion. On site observation of office space and environment, availability of staff, equipment and supplies, telephone and email communication was done.

Interview and discussion topics included assessment of the HRH situation – numbers, gender, distribution... - working conditions, support and supervision with focus on IA contributions. The upgrading questionnaire assessed impact of upgrading with focus in particular on new responsibilities if any after upgrading (See 21 for list of questions and questionnaire).

All efforts were made to create an environment in which individuals could speak frankly. All informants were assured of the confidentiality of their response. Indicators in three main areas were used: outputs as planned, basic HRH numbers and ratios and qualitative reports of results and impact (For detail see 21).

A major constraint was that the assessment was undertaken during a period when the introduction of Business Process Reengineering was making high demands on senior staff. The Focus Group Discussion planned with RHB staff could not take place, for example, as only two staffs and the retiring HR Manager were available.

It was not possible to meet Federal MOH personnel or other implementing partners in the Region, due to pressure of other programs and lack of time.

A few months after the submission of the report, a debriefing workshop was conducted with senior staff of the Regional Health Bureau and their views have been considered in the preparation of this paper.

## Results

### Shortages

In 2009, the Region set up a HRH database - the HRH Inventory Checklist. This is the responsibility of the RHB Planning Process and is designed to monitor numbers and categories of professional health workers, and their distribution by health facility, public or private, woreda and zone, length of service, age and sex. The database was not yet fully completed, and so it was not used for this assessment, but it has the potential to provide valuable HRH reports. Instead, HR information was analyzed from regional and national reports which showed shortages of HRH in the region in all categories except HEWs, but more pronounced in some, such as physicians and midwives. Overall, the density of doctors, nurses and midwives was very low by any standard and at 2.29 per 10,000 more than 10 times lower than the WHO norm of 25/10,000 recommended to ensure adequate maternal and child health (MCH) care (Table 1).

Table 2: Evolution of HRH in SNNP Region 2002-2008

	2001/2	2004/5	2008/9
Population	13,292,976	13,747,260	15,927,648
Medical Doctor	163 (1:81,552)	97 (1:141,724)	125 (1:127,421)
Health Officer	52	116	450
Nurse*	1140	2334	3067
Health Assistant	1308	549	
Pharmacist		8	
Sanitarian	171	250	206
Pharmacy Technician	92**	192	
Laboratory Technician	212	331	
Health Extension Worker	-	747	7915

Source: 11; 14 for 2009

\*includes midwives \*\*includes Pharmacists

In 2002/3, there were only 228 (107 female) midwife nurses in the region and this had not improved by 2006/7 when there were 233, of which 92 were female (18). This was probably due to the phasing out and upgrading of junior midwives. The intake of midwifery students has recently been increased, but these have not yet graduated (see section on Training Institutions below). *Other mid-level health workers* were also in short supply such as pharmacy and laboratory technicians.

For HEW however, there has been an intensive program of training and deployment supported by IA funds and all kebeles are now covered with at least one HEW. The Region had the highest density in the country at 1 per 2213 population, compared to national average 1:3224 (18).

There was a clear shortage of qualified management staff. Almost all levels, from the RHB to the woreda administrations, are understaffed, with allocated posts vacant. The situation seems to have been aggravated by

Table 1: Shortages of health professionals

	Health Worker density /10,000	
	SNNPR 2008/09*	Ethiopia 2007/08**
Physicians	0.08	0.26
Nurses (All)	1.93	2.12
Health Officers	0.28	0.16
Total above	2.29***	2.54***
Environmental Health Health Extension Workers	0.13	0.21
	4.97	3.1

Sources: \*14, \*\*12, \*\*\*WHO recommended norm 25/10,000.

The number of doctors in the region has stagnated in the last few years and population to physician ratio has increased substantially since 2001/02 GC (Table 2). This is reflected in understaffing of almost all the hospitals in the region. Thus, for example, Elleni Hospital in Hossana had only two specialists and eight GPs out of 16 and 24 respectively allocated in its staffing pattern.

On the other hand, there has been a large increase of HO from a handful in 2002 to 450, including upgrading of nurses to HOs, and they are playing a key role in managing health centers and multiple other functions at woreda, health centers (HC) and hospital levels..

organizational changes in structure and posts due to the ongoing BPR process, in which managers are required to participate in redefining responsibilities and positions, and to reapply for employment.

### *The Paradox of Unemployment amid Shortage*

A number of health workers have been allocated to woredas but the woreda health offices have not been able to employ them because sufficient budget has not been allocated to fill all the established posts. Examples include, to a varying degree, sanitarians, BSc nurses and dental surgeons. The paradox is that for, at least, mid-level health workers, the candidates were selected and sent for training by the woredas themselves which need the staff for vacant posts, but the Woreda Council has not made the necessary budgetary allocation. There seem to be three underlying causes: problem with woreda budgeting, lack of planning skills to deal with Regional targets and large increases in output of generic and upgrading training.

There has also been an issue of a large number of staff 'floated' by the BPR process. This re-organization included a requirement that all professionals must have Diploma qualification as minimum. All junior mid-level health workers with Certificates had to be upgraded or removed from work. The majority have been upgraded, but a substantial number remained in SNNPR until November 2009 "floating" with pay but no work, for example 15 in one woreda. At the beginning of December, a national announcement was made that they would all be redeployed to posts, but the episode has made great demands on the HR Department and raised feelings of insecurity among staff.

### **Response to Shortages**

The response at the national level for the shortage of

HRH is a 'flooding' strategy, meaning large and rapid increases in numbers of training places for health categories. This has included a very rapid increase in the number of medical schools and their intake. An accelerated training program for HO has been developed and the training of some 3000 students (generic and post-basic) has started (8). There has also been substantial increase in the intake of mid-level workers trained at the regional level. The Hawassa College of Health Sciences for example, established in 1996EC (2003/4), has graduated some 3175 professionals (45.4% female) in various categories of which 475 graduated before the College phase. Enrolment of students has grown very rapidly to meet the request of the RHB for 2,180 in 2002 EC [2009/10] (Table 3).

**Table 3: Hawassa College, graduates and enrolment**

Category	Graduates 1990-2002 EC (1997/8-2009/10)		2001EC (2008/9)			
			Graduates		Enrollment	
	Number	%	Total	Female(%)	Total	Female (%)
Clinical Nurse	1,380	43.5	234	90 (38.5)	469	224 (47.8)
Community Nurse	292	9.2	53	27 (50.9)	360	188 (52.2)
Midwife Nurse	588	18.5	94	94 (100)	351	351 (100)
Lab Technician	539	17.0	83	38 (45.8)	288	128 (44.4)
Pharmacy Technician	376	11.8	82	30 (36.5)	370	128 (34.6)
Radiography	-	-	-	-	21	6 (28.6)
<b>Total</b>	<b>3,175*</b>	<b>100</b>	<b>546</b>	<b>279 (51.1)</b>	<b>1859</b>	<b>1025 (55.1)</b>

Source: Adapted from Hawassa College Reports \* 45.4% female

The rapid increase in enrolment has not been matched by commensurate growth in other inputs. Thus the number of academic staff has remained the same between 2001 and 2002EC even though the number of students grew from 1,859 to 2,189 (almost 18% increase as shown in

Table 4). Encouragingly, the budget of the college has increased from about Birr 4 million in 1997 EC to about Birr 14 million in 2002 EC at an average growth rate of 12% per year (Source: *College Reports 2001 & 2002 EC*).

**Table 4: Hawassa College, academic staff by qualification 2001 and 2002 EC**

Qualification	2001		2002	
	Total	Female	Total	Female
2nd Degree	20	2	23	2
1st Degree	93	27	89	29
<b>Total</b>	<b>113</b>	<b>29</b>	<b>112</b>	<b>31</b>
Number of students	1,859	1,025	2,189	
<b>Student/Staff Ratio</b>	<b>16.5</b>		<b>19.5</b>	

Source: College Reports 2001 & 2002 EC

### **Inequitable Distribution**

There was some evidence that, as for the rest of the country, there were inequitable distributions of HRH with highly skilled health workers congregating in the urban areas. Laudable measures have been taken to remedy the situation. In-line with government policy, SNNPR has been highly successful in training and deploying HEWs so that now 100% of kebele health posts are staffed. Detailed criteria for defining hardship areas have been developed (Hardship Areas SNNPR Regulation Number 37/1997EC) and attempts to place *more staff in underserved areas*, particularly doctors, have been made with incentives such as top-up salaries,

better training opportunities, and faster transfer back to specialty posts.

More importantly, construction of Primary Health Care Unit (PHCU) has been accelerated so as to bring services closer to rural areas with a notable expansion of the Health Extension Program (HEP) in particular. The distributions of PHC services and associated mid-level HWF have improved. All kebeles now have at least one HEW. However the distribution of higher level health workers, doctors in particular, reportedly remains highly skewed in favor of urban and more developed areas.

Clear and strong measures have been taken to rectify the *gender imbalance*. Thus 50% of intake for training in all categories of training should be female, while the intakes for midwives and HEW (except in pastoralist areas) are 100% female. This seems to be strictly implemented as could be seen from the experience in Hawassa College (Table 3). The *gender balance* in the HWF seems to have improved significantly at least for mid-level HRH. Thus close to 50% of the graduates from Hawassa College in the last 5 years were female and reportedly, the situation is similar in the other colleges in the region. Presumably this is reflected in the health services across the region. However this does not seem to be reflected in higher level leadership positions. Thus all the persons we met at RHB, ZHD and WoHO were male. Even in Hawassa College, most of the academic staff (75% and more significantly 90% of those with 2nd degree) is male (Table 4). An important concern in gender parity is the higher dropout rates for girls in spite of efforts by the College to mitigate unfavorable factors in retention of girl students. Thus of the total dropouts (147) in 2001EC, 117 (79.6%) were girls and of these, 106 (90.6%) dropped out because of low performance.

Of note, neither geographic and gender distribution were reported in the EFY2000 Annual Review Meeting even though gender distribution was given in reports to IA and in training reports.

#### ***Inappropriate Skill Mix***

There has been a major shift recently from what were called Front Line health Workers (FLW) - *many specialized categories* of primary health care workers, who were not able to cover for each other and therefore requiring unrealistic levels of staffing - to HEW (10). The many categories of nurses (clinical, community, public health... each with junior and senior levels) has been reduced with focus now mostly on clinical nurses. There is, as for other parts of the country, a major shortage in midwifery skill in spite of the high maternal mortality. Not only the number of midwives is low but high proportions up to now were male. There has recently been major increase in *midwifery training* (all female) even though most consider it is still not adequate in view of the size of the need and the backlog.

*Task-shifting*, especially for clinical tasks, continues to be a current issue since the first HO training started in 1953. The need for and the place of this type of health worker to carry out specified tasks of doctors and nurses has been widely argued in Ethiopia and internationally (6, 21). But there has been resistance from conventional professionals, doctors in particular, so that HO training has been discontinued and restarted, while a lower category of Health Assistants have also been introduced and are now being phased out most being upgraded to nursing. The picture therefore is of frequently changing and somewhat uncertain professional categories and task-shifting policies (6). Thus, *task-shifting* is still an evolving area in spite of the long experience with HOs.

The issues of career structure and relationship with the conventional professions persist. There have been some new initiatives such as training a selected number of HOs to undertake Emergency Obstetric Care (EmOC), caesarean section in particular, independently in remote HC.

*Poorly defined responsibilities* of upgraded staff are also a major concern, as they form a large and increasing group who are expected to take on key tasks of midlevel supervision and management. Six staff in Hawassa Health Centre were asked about the effect of their Upgrading on their responsibilities. The three technicians said there had been no change except "broader lab skills". The two Nurses described new responsibilities including TB treatment, MCH education, treatment and counseling for HIV/AIDS, "more skills to do same work", and one said he/she was "better informed, better attitude, stronger confidence". The Nurse upgraded to HO had been given responsibility for HC management. Interviews at the Hawassa HS College, Zone and Wereda level indicated a lack of clarity in the objectives of upgrading, in what staff are supposed to do after the upgrading and what they are actually doing.

#### ***Low Productivity***

There are clear indications of *lack of coordination* between construction of new facility buildings, disbursement of supplies and equipment, and recruitment or redeployment of required staff, leading to wastage of unemployed professionals.

The *supervision and performance appraisal* of front line health personnel was carried out by a standard system of checklist and schedule of visits by supervisors. Under the BPR re-organization, all staff have to sign a performance agreement and report on progress monthly and quarterly. There was emphasis on achieving quantitative activity targets. In examples of performance appraisal forms from both the public and private sector, personal characteristics (such as adherence to rules, timekeeping, commitment...) were given much greater weight than technical knowledge and quality of work.

The health sector, and all the Ethiopian public sector, was at the time of the assessment undergoing re-organization according to Business Process Reengineering (BPR) "aimed at bringing effectiveness and efficiency in the execution of business practices to achieve dramatic improvement in critical and contemporary measures of performance such as cost, quality, service and speed" (MOH website).

For the health sector as a whole, three main functions are identified: Provider, Purchaser and Regulation. At Federal level, eight core processes and six support processes (including human resources development/management) for the organization of work are defined (Annual review meeting HSDP Oct 2008). At Regional Bureau level, heads of each process are titled

“Process Owner”, and at Zone level “Process Coordinator” and within each process, health workers work together in Case Teams. Some of the ongoing effects of the introduction of BPR in the health sector in SNNPR are changes in staffing standards at region, zone, woreda and facility levels, redefinition of posts, and requirements that current managers should reapply, or be reassessed for employment. Also, as part of BPR, a new HRH policy was set that all health professionals should have a minimum of Diploma qualification with effects discussed under Shortages above.

### ***Inadequate Remuneration***

The salaries for health workers are very low and likely to be below a living wage for junior professionals. It is stated that salaries are high relative to the GDP, but this does not mean that they provide an adequate living.

The HSDP also highlights a “non-conducive working environment, shortages of staff housing and transport facilities for highly qualified personnel to stay in remote areas” (10). Health workers appear to have been particularly disadvantaged, as they used to receive free health care but this has been withdrawn, while other public sector personnel, such as the telecommunications sector, continue to receive this benefit. In addition, previously regular annual increments for health sector employees were frozen for some six years.

Training opportunities were the main motivator for health centre staff, as stated by an Environmental Health Officer in one health centre: “It’s the only reason I work in the public sector”. During the visits made for this assessment, many examples came up of how staff saw upgrading and short in-service training as the main focus of their development and reason to work. Staff who could not get places through the public system would pay for courses in private colleges.

There are hardship incentives to work in difficult woredas, which are reported to have had an effect on retention at first, but which has subsequently largely worn off due to inflation. There was a cost of living adjustment to salaries in recent years, but this was not adequate to keep up with inflation. The resulting low salary and benefit package makes migration to more highly paid systems very attractive for highly qualified health professionals. Staff also may receive overtime and pay for night duty where available. Apart from this, there were no incentives reported, either financial or non-financial.

### **Conclusion and Recommendations**

Overall, the Region has made notable advances in HRH development and IA impact has been highly positive even though direct attribution was difficult due to the commendable, region-wide integrated budget support. The HRH stock in the region has grown substantially since 2002 and IA has made a major contribution in long term training of mid-level workers such as at Hawassa

College. SNNPR has closed most of the gaps that existed in previous years, in particular for mid-level health workers of all categories. The number of Health Officers has also grown substantially and the HEP has now reached all kebeles with at least one HEW in each. These are positive trends to which IA has contributed substantially as the region has allocated IA support largely to mid-level and HEW training.

There seems to be no clear response to the issue of unemployment of some trained health workers. At present the health workers seem to be sent back and forth with accompanying letters between the woredas, zone, region and even the federal level. There has been a substantial increase in HWF between 2002 and 2008 for mid-level categories in particular (Table 2). However, the number of physicians has decreased. Reportedly, higher numbers of doctors are allocated to the region from the Federal level than in previous years, but a large number do not report to the region (more than 50% in the current year[14]), and many leave after a short stay. The shortage of midwives persists and is a serious problem for maternal and child health even though higher numbers of trained midwives will graduate as of 2009.

The IA contribution to generic training of nurses and health extension workers has contributed notably in increasing numbers of trained staff. Training places for midwives are still insufficient in relation to need, but higher intakes are planned with the allocation of IA support to expansion of the four Health Sciences Colleges. Doctors are trained at national not regional level institutions, so any input from IA on the serious MD shortage must be through national policy discussions on medical training, or through involvement in retention policies in the Region.

HRH planning is not an easy task anywhere in the world but is compounded by a number of factors in the situation in the region, in particular the weak HRH base in general and few management and planning skills; the ongoing decentralization and BPR processes. Under these circumstances, future HRH actions should focus on:

- More rigorous and participatory planning tuned to the financial capacities of the Weredas so as to minimize unemployed newly trained;
- Advocacy on extending the timescale of training targets to match health training institutions outputs with posts available within salary budgets; and
- Tailored and coordinated short training programs in HR management and HR planning, which may be integrated with general management and planning.
- Ensuring adequate working conditions for staff, equipment, supplies and continuity of services as PHC services, as delivered by HEW in particular, have reached even the most remote and previously neglected areas in SNNPR, such as pastoralist and/or shifting agriculture.

- Measures to improve quality of training including
  - Advocacy on **long term** benefits of quality
  - Introducing external Quality Assessment systems
  - Providing for adequate practice field sites
  - Strengthening the laudable measures taken to date to ensure *gender equity* in training
  - Better coordinated in-service training - promote training coordination function at RHB
- Policies for **long term** future development as the structure of the HWF in Ethiopia has been in a flux for a considerable time, with initiatives in new categories of some health workers and the phasing out of others. A review of the long term position of such seemingly stop-gap categories as HO and HEW is required. This should lead to a better long term perspective which can be harmonized with the completion of the BPR process. In the meantime, there is still need to increase the number and competence of midwives, strengthen training in EmOC at primary level, and develop a long term strategic perspective on the future role and career structure of Health Officers and Health Extension Workers.

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