

Round table

Can countries of the WHO African Region wean themselves off donor funding for health?

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Abstract More than 20% of total health expenditure in 48% of the 46 countries in the WHO African Region is provided by external sources. Issues surrounding aid effectiveness suggest that these countries ought to implement strategies for weaning off aid dependency. This paper broaches the following question: what are some of the strategies that countries of the region can employ to wean off donor funding for health? Five strategies are discussed: reduction in economic inefficiencies; reprioritizing public expenditures; raising additional tax revenues; increased private sector involvement in health development; and fighting corruption.

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La traducción en francés de ce résumé figure à la fin de l'article. Al final del artículo se facilita una traducción al español. الترجمة العربية لهذه الخلاصة في نهاية النص الكامل لهذه المقالة.

Introduction

According to the recommendation by the WHO Commission on Macroeconomics and Health that countries need to spend US\$ 34 per person per year to provide a set of essential interventions,¹ the WHO African Region with a population of about 722 million requires about US\$ 24.5 billion per year. The Commission's estimate did not include the cost of strengthening national health systems. In 2004, the total health expenditure in the WHO African Region was about US\$ 35.53 billion, of which approximately US\$ 2.23 billion (6.25%) was from external sources. The magnitude of external funding on health as a percentage of total health expenditure varies widely between countries. Eighteen countries received < 11% of their total health expenditure from external sources; 9 countries received 11–20%; 7 countries received 21–30%; 6 countries received 31–40%; and the remaining 6 countries received 41–60% of their total health expenditure from external sources.²

Given existing issues surrounding aid effectiveness, countries of the region ought to implement strategies for weaning donor funding for health.³ This

paper attempts to discuss the following question: what are some of the strategies that countries of the WHO African Region can employ to wean themselves off donor funding for health?

Possible strategies

Reduction in economic inefficiencies

Productivity within the health system is a measure of the physical output produced from the use of a given quantity of inputs. Economic efficiency is about producing the maximum health services possible from an available quantity of health system inputs, using cost-minimizing production techniques. The studies reviewed in Table 1 show significant scope for increasing provision of health services using the current levels of resources allocated to hospitals and health centres. This could entail either leveraging of health promotion strategies to create demand of underutilized primary health care or transferring specific inputs from overresourced to underresourced health facilities.⁴

Other inefficiencies relate to misallocation of resources by regions (e.g. choice of health facility sites based on political criteria rather than need), lev-

els of care (investment of the majority of resources in tertiary and secondary hospitals instead of in cost-effective primary health care) and channelling of the majority of donor funds through vertical programmes instead of through the national health system.^{15,16} Capital investment decisions and choice of public health interventions ought to be based on cost-effectiveness and cost-benefit analysis criteria. Countries should also institutionalize economic efficiency monitoring within national health management information systems with a view to implementing appropriate policy interventions to reduce wastage of scarce health systems inputs.¹⁰

Reprioritizing public expenditure

Countries might be able to create resources for health development through reductions in unproductive expenditure in, for example, the military.¹⁷ The potential military expenditure savings were calculated as:

Potential savings = country's actual per capita military expenditure – the African region per capita military expenditure × the national population for the country

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Table 1. Review of health facility efficiency studies in the WHO African Region

Country and DMU	No. of DMUs with technical inefficiency	Average technical efficiency scores among inefficient DMUs (%)	Scope for increasing health service output (%)
Angola			
28 municipal hospitals in 2000 ⁴	17	66.2	33.8
28 municipal hospitals in 2001 ⁴	16	65.8	34.2
28 municipal hospitals in 2002 ⁴	18	67.5	32.5
Ghana			
17 district hospitals ⁵	8	61	39
17 health centres ⁵	3	49	51
Kenya			
54 public hospitals ⁶	14	84	16
32 public health centres ⁷	18	65	35
Namibia			
20 public hospitals in 1997/1998 ⁸	13	56	44
24 public hospitals in 1998/1999 ⁸	16	64	36
26 public hospitals in 1999/2000 ⁸	23	59	41
26 public hospitals in 2000/2001 ⁸	21	60	40
Seychelles			
17 health centres in 2001 ⁹	7	95.8	4.2
17 health centres in 2002 ⁹	9	93.2	6.8
17 health centres in 2003 ⁹	8	94.0	6
17 health centres in 2004 ⁹	7	96.4	3.6
Sierra Leone			
37 peripheral health units ¹⁰	22	63	37
South Africa			
55 hospitals ¹¹	22	76	24
155 public clinics ¹²	108	61	39
Zambia			
30 hospitals ¹³	18	45	55
40 health centres ¹⁴	33	54	46

DMU, decision-making unit.

Military expenditure data for 32 countries in the African region (for which data were available) were obtained from the World Factbook published by the Central Intelligence Agency (CIA), United States of America.¹⁸

The per capita military expenditure was US\$ 1–3.99 in 7 countries; US\$ 4–6.99 in 10 countries; US\$ 7–10 in 4 countries; US\$ 11–16 in 3 countries; and > US\$ 16 in 8 countries. The average military expenditure per person among the 32 African countries was US\$ 16.02. Arguably the 8 (25%) countries that have an above-average per capita military expenditure have a scope for reducing military expenditures for use in health development.¹⁷ This could entail reducing the numbers of new recruits into the military, freezing senior military positions when occupants retire (or die before retirement) and refraining from acquiring

expensive military aircrafts, vehicles and equipment. Such a reduction should be planned and done over a realistic period of time to avoid security problems.

Raising additional revenue

According to Heller¹⁷, “for low income countries, raising the tax share to at least 15% of gross domestic product (GDP) should be seen as a minimum objective”. The average current tax level in Africa is 20.2% of GDP compared to 38% of GDP in industrialized countries.¹⁹ Of 39 WHO African Region countries whose data were available, current tax level was < 15% of GDP in 13 countries; 15–20% in 12 countries; 21–30% in 8 countries; and > 30% in 6 countries. Therefore, the 13 (33%) countries whose tax share of GDP is < 15% have a scope to increase it to 15%. Raising additional tax revenues requires “enhanced autonomy of tax

administrations, capacity-building of tax administration, performance-based infrastructures, simplification of laws and procedures, universal self-assessment in all taxes, sharing information across inspectors, independent internal controls, risk management principles, audit-based taxpayer controls, improved dispute resolution mechanisms, and professional and efficient taxpayer services”.¹⁹

Increased private sector involvement

The private health sector plays a significant role in health service provision, financing (about half of total health expenditure), production of health inputs (medicines, health technologies, human resources), construction of health infrastructure and provision of water and sanitation. Countries can boost private sector contributions by

developing enabling policy and regulatory frameworks, developing and enforcing quality standards, expanding risk pooling arrangements, contracting the private sector to deliver specific services, and improving the ability of the local financial institutions to support health service enterprises.²⁰

Fighting corruption

Corruption is misuse of entrusted power for private (pecuniary or monetary) gain. It reduces the resources available for health development, lowers the quality of services, compromises effective coverage of health services and inflates the unit costs of services provided.²¹ Corruption in financial resource management can be attenuated by implementing legal and institutional frameworks; avoiding off-budget activities; developing sound budget and expenditure systems; building budget literacy among parliamentarians, media and civil society; making budgetary information available for public scrutiny; transferring funds directly from ministries of finance to health facilities (preceded by development of requisite planning, budgeting, monitoring and evaluation capacities); institutional-

izing national health expenditure tracking; strengthening the effectiveness of audit institutions; encouraging public participation in priority-setting, resource allocation, execution, performance monitoring and audit processes; and channelling all aid flows for health development through general government budget support.^{20,22} Corruption in management of medical supplies can be reduced by developing transparent regulatory policies for medicines, procedures and criteria for drug licensing, accreditation and approvals; adopting the WHO Essential Medicines List; defining clear and transparent procurement rules and guidelines for competitive tendering; establishing inventory control systems and security at warehouses; and banning practices of gifts and sponsorship in the marketing of medicines.^{20,22}

Corruption in health worker/patient interaction can be improved by implementing a patients' rights charter and improving access to information; promoting contractual relationships between government and health workers; introducing official copayments; improving hierarchical accountability and human resource management;

adopting codes of ethics regulating the medical profession; and involving the community in health services management through local health boards or committees.^{20,22}

Conclusion

Armed with a clear vision and backed by effective programmes for improving economic efficiency of public and private expenditure; identifying and pruning unproductive public expenditures; strengthening of tax administration systems; creating an environment for enabling private health sector growth; and boosting health development governance, countries of the African region have a high probability of weaning off donor funding for health in this century. Pursuit of such a noble vision should be supported by an enabling macroeconomic and political (i.e. internally secure) environment. ■

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Résumé

Les pays de la Région africaine de l'OMS peuvent-ils se passer des apports des donateurs pour financer la santé ?

Plus de 20 % des dépenses totales de santé de 48 % des 46 pays de la Région africaine de l'OMS sont financés par des sources externes. La problématique liée à l'efficacité de l'aide internationale amène à penser que ces pays devraient mettre en œuvre des stratégies pour s'affranchir de leur dépendance à l'égard de cette aide. L'article examine quelles stratégies pourraient être appliquées par les pays de la Région pour se

passer des donateurs dans le financement de la santé. Cinq de ces stratégies sont analysées : amélioration des insuffisances sur le plan économique, révision des priorités des dépenses de santé, collecte de revenus fiscaux supplémentaires, implication accrue du secteur privé dans le développement de la santé et lutte contre la corruption.

Resumen

¿Pueden los países de la Región de África de la OMS dejar de depender de los donantes para financiar la salud?

Más del 20% del gasto sanitario total del 48% de los 46 países de la Región de África de la OMS se financia a partir de fuentes externas. Diversos aspectos relacionados con la eficacia de la ayuda parecen indicar que estos países deberían aplicar estrategias que les permitieran acabar con esa dependencia de la ayuda externa. En este artículo se plantea la siguiente cuestión: ¿qué

estrategias podrían emplear los países de la región a fin de dejar de depender de los donantes para financiar la salud? Se examinan cinco estrategias: reducción de las ineficiencias económicas; repriorización del gasto público; aumento de la recaudación de ingresos fiscales; aumento de la participación del sector privado en el desarrollo sanitario; y lucha contra la corrupción.

ملخص

هل تستطيع بلدان إقليم منظمة الصحة العالمية الإفريقي فطم نفسها عن تمويل المانحين للخدمات الصحية فيها؟

التي يمكن لبلدان الإقليم توظيفها من أجل فطم نفسها عن تمويل المانحين للخدمات الصحية فيها؟ إن هناك خمس استراتيجيات مطروحة للمناقشة هي: عدم الكفاءة الاقتصادية، وإعادة ترتيب أولويات الإنفاق العام، ورفع إيرادات الضرائب الإضافية، وزيادة إشراك القطاع الخاص في التنمية الصحية، ومحاربة الفساد.

إن أكثر من 20% من إجمالي النفقات الصحية في 48% من البلدان الستة والأربعين الأعضاء في إقليم منظمة الصحة العالمية الأفريقي، تتوفر من مصادر خارجية. وتشير القضايا المحيطة بفعالية المعونات إلى أنه ينبغي لهذه البلدان أن تنفذ استراتيجيات تهدف إلى أن تفتطم نفسها عن الاعتماد على المعونة. وتطرح هذه الورقة السؤال الآتي: ما هي هذه الاستراتيجيات

References

1. Commission on Macroeconomics and Health. *Macroeconomics and health: investing in health for economic development*. Geneva: WHO; 2001.
2. WHO Statistical Information System. Geneva: WHO; 2008. Available from: <http://www.who.int/whosis/en/index.html> [accessed on 30 September 2008].
3. *Paris declaration on aid effectiveness: ownership, harmonization, alignment, results and mutual accountability*. Paris: Organisation for Economic Co-operation and Development; 2005.
4. Kirigia JM, Emrouznejad A, Cassoma B, Asbu EZ, Barry S. A performance assessment method for hospitals: the case of municipal hospitals in Angola. *Journal of Medical Systems* 2008.
5. Osei D, George M, d'Almeida S, Kirigia JM, Mensah AO, Kainyu LH. Technical efficiency of public district hospitals and health centres in Ghana: a pilot study. *Cost Eff Resour Alloc* 2005;3:9. PMID:16188021 doi:10.1186/1478-7547-3-9
6. Kirigia JM, Emrouznejad A, Sambo LG. Measurement of technical efficiency of public hospitals in Kenya: using data envelopment analysis. *J Med Syst* 2002;26:39-45. PMID:11777310 doi:10.1023/A:1013090804067
7. Kirigia JM, Emrouznejad A, Sambo LG, Munguti N, Liambila W. Using Data Envelopment Analysis to measure the technical efficiency of public health centers in Kenya. *J Med Syst* 2004;28:155-66. PMID:15195846 doi:10.1023/B:JOMS.0000023298.31972.c9
8. Zere A, Mbeeli T, Shangula K, Mandhlate C, Mutirua K, Tjivambi B, et al. Technical efficiency of district hospitals: evidence from Namibia using Data Envelopment Analysis. *Cost Eff Resour Alloc* 2006;4:5. PMID:16566818 doi:10.1186/1478-7547-4-5
9. Kirigia JM, Emrouznejad A, Vaz RG, Bastiene H, Padayachy J. A comparative assessment of performance and productivity of health centers in Seychelles. *Int J Prod Perform Manag* 2008;57:72-92. doi:10.1108/17410400810841245
10. Renner A, Kirigia JM, Zere AE, Barry SP, Kirigia DG, Kamara C, Muthuri HK. Technical efficiency of peripheral health units in Pujehun district of Sierra Leone: a DEA application. *BMC Health Serv Res* 2005;5:77. PMID:16354299 doi:10.1186/1472-6963-5-77
11. Kirigia JM, Lambo E, Sambo LG. Are public hospitals in Kwazulu-Natal province of South Africa technically efficient? *Afr J Health Sci* 2000;7:25-32. PMID:17650022
12. Kirigia JM, Sambo LG, Scheel H. Technical efficiency of public clinics in Kwazulu-Natal province of South Africa. *East Afr Med J* 2001;78:S1-13. PMID:12002061
13. Masiye F. Investigating health system performance: an application of data envelopment analysis to Zambia hospitals. *BMC Health Serv Res* 2007;7:58. PMID:17459153 doi:10.1186/1472-6963-7-58
14. Masiye F, Kirigia JM, Emrouznejad A, Sambo LG, Mounkaila A, Chimfwembe D, et al. Efficient management of health centres human resources in Zambia. *J Med Syst* 2006;30:473-81. PMID:17233160 doi:10.1007/s10916-006-9032-1
15. Gottret P, Schieber G. *Health financing revisited: a practitioner's guide*. Washington, DC: The World Bank; 2006.
16. *Health financing: a strategy for the African Region*. Brazzaville: WHO Regional Office for Africa; 2006.
17. Heller P. *Understanding fiscal space* [policy discussion paper PDP/05/4]. Washington, DC: International Monetary Fund; 2006.
18. *The world factbook*. Washington, DC: Central Intelligence Agency; 2008. Available from: <http://www.cia.gov/library/publications/the-world-factbook/> [accessed on 30 September 2008].
19. Ruhashyankiko J-F, Stern RE. *Incentive structure of tax systems in Africa*. Washington, DC: International Monetary Fund; 2006.
20. International Finance Corporation. *The business of health in Africa: partnering with the private sector to improve people's lives*. Washington, DC: The World Bank; 2008.
21. Transparency International. *Global corruption report 2006: corruption and health*. London: Pluto Press; 2006.
22. Vian T. Review of corruption in the health sector: theory, methods and interventions. *Health Policy Plan* 2008;23:83-94. PMID:18281310 doi:10.1093/heapol/czm048

Round table discussion

Impossible to “wean” when more aid is needed

Gorik Ooms^a & Wim Van Damme^a

Kirigia and Diarra-Nama from the WHO Regional Office for Africa say that funding for health in the WHO Africa Region remains inadequate and that, in some countries, is significantly dependent on donor funding. They propose five strategies for these countries to “wean themselves off” donor funding. While each of the proposed strategies might have some value in itself, they will not succeed in the double objective the authors set: to wean countries from depending upon international health aid and to achieve the US\$ 34 per person annual health expenditure target suggested by the Commission on Macroeconomics and Health¹ – an amount that must now be adjusted to US\$ 40 due to inflation.²

Of the five strategies proposed, only the second and third strategy – reprioritizing public expenditure and raising additional domestic revenue – would increase domestic financial resources for health. The other three strategies (reducing inefficiencies and corruption and increasing private sector involvement in health development) might improve efficiency but would not bring countries closer to the US\$ 40 per person annual target. It could be argued that with increased efficiency, less money is required. However,

the Commission’s target is based on need and does not factor in inefficiencies or corruption.

Furthermore, even if countries were to reprioritize public expenditure and raise additional domestic revenue, this is unlikely to generate sufficient additional financial resources, particularly for those countries most dependent on international health aid. To test this, we estimated the impact of these two strategies for the 4 countries where – according to the WHO Statistical Information System – the external contribution to total health expenditure exceeded 40% in 2004 (Madagascar, Malawi, Mozambique and Sao Tome and Principe), plus four other countries where the external contribution to total health expenditure exceeded 40% in 2005 (Liberia, Rwanda, Sierra Leone and Zambia).³

Kirigia and Diarra-Nama propose reprioritizing public expenditure by adjusting military expenditure to the average of the countries of the WHO African Region. We estimated military expenditure per inhabitant by using data from the CIA of the United States of America⁴ – which are expressed as a percentage of GDP – and multiplied those with GDP per capita estimates of the International Monetary Fund.⁵ Using the average annual military expenditure of US\$ 16 per person provided by Kirigia and Diarra-Nama, we find that the 8 countries of our selection already spend less than US\$ 16 per person per year on the military. The proposed strategy would therefore not make a difference (Table 1).

The other strategy proposed to raise domestic financial resources for health is that all countries should aim for government revenue equivalent to 15% of GDP. Five out of the 8 countries of our selection already have higher government

Table 1. Impact of strategies proposed to reduce dependency on aid

Countries	Justification of selection: external contribution to total health expenditure		GDP per capita, 2006 ⁵ (US\$) ^a	Impact of second strategy proposed			Impact of third strategy proposed		Current situation
	2004 ³ (%)	2005 ³ (%)		Military expenditure pp/yr, 2006 ⁴ (% of GDP)	Military expenditure pp/yr, 2005 (US\$) ^a	Budget available pp/yr (US\$) ^{a,b}	Government revenue excluding grants, 2005 ⁵ (% of GDP)	Budget available pp/yr (US\$) ^{a,c}	
Liberia	33.2	41.2	126.0	1.3	1.6	0.0	18.6	0.0	10.0
Madagascar	42.2	46.1	278.0	1.0	2.8	0.0	11.3	1.5	9.0
Malawi	59.4	61.2	157.0	1.3	2.0	0.0	17.5	0.0	19.0
Mozambique	50.2	66.5	344.0	0.8	2.8	0.0	15.9	0.0	14.0
Rwanda	35.9	43.9	268.0	2.9	7.8	0.0	12.9	0.8	19.0
Sao Tome and Principe	50.8	49.9	698.0	0.8	5.6	0.0	21.3	0.0	49.0
Sierra Leone	31.9	41.0	232.0	2.3	5.3	0.0	11.8	1.1	8.0
Zambia	34.0	40.5	366.0	1.8	6.6	0.0	16.9	0.0	36.0

GDP, gross domestic product; pp/py, per person per year.

^a US\$ amounts use average exchange rate.

^b If military expenditure were reduced to US\$ 16 per person per year and if 15% of the reduced expenditure were allocated to health.

^c If government revenue increased to 15% of GDP and if 15% of the increase was allocated to health.

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revenue. Three out of 8 countries would indeed increase financial resources if they followed the recommendation, but even if they spent 15% of these additional financial resources on health – in line with the Abuja Declaration⁶ – it would merely raise between US\$ 0.8 per person per year (Rwanda) and US\$ 1.5 per person per year (Madagascar).

Furthermore, 6 out of these 8 countries still face a huge gap between current total health expenditure and the revised target made by the Commission on Macroeconomics and Health: in Liberia, Madagascar, Malawi, Mozambique, Rwanda and Sierra Leone, total health expenditure is still below US\$ 20 per person per year, even with 40% coming from international health aid.

Even if some countries of the African region might be able to wean themselves from international health aid, others obviously cannot: they need increased aid, urgently. This can be achieved through sustained international health aid, which should not be seen as an act of charity to be overcome as soon as possible, but as an act of global solidarity, with health recognized as a human right that entails both national and international duties. For these reasons we agree with the position of WHO's Director-General who has called for much greater, and more predictable, international health aid for Africa.⁷ We hope that her voice will be heard and understood throughout WHO and the wider international community. ■

Competing interests: None declared.

References

1. Commission on Macroeconomics and Health. *Macroeconomics and health: investing in health for economic development*. Geneva: WHO; 2001.
2. Carrin G, Evans D, Xu K. Designing health financing policy towards universal coverage. *Bull World Health Organ* 2007;85:652. PMID:18026615 doi:10.2471/BLT.07.046664
3. WHO Statistical Information System. Geneva: WHO; 2008. Available from: <http://www.who.int/whosis/en/index.html> [accessed on 30 September 2008].
4. *The world factbook*. Washington, DC: Central Intelligence Agency; 2008. Available from: <http://www.cia.gov/library/publications/the-world-factbook/> [accessed on 30 September 2008].
5. *Regional economic outlook: sub-Saharan Africa*. Washington, DC: International Monetary Fund; 2008. Available from: <http://www.imf.org/external/pubs/ft/reo/2008/AFR/eng/sreo0408.pdf> [accessed on 30 September 2008].
6. *Abuja Declaration: African summit on Roll Back Malaria*. Geneva: WHO/Roll Back Malaria Partnership; 2003. Available from: http://www.rbm.who.int/docs/abuja_declaration.pdf [accessed on 30 September 2008].
7. Chan M. Africa's healthcare needs foreign support. *Business Daily Africa*, September 2008. Available from: http://www.bdafrica.com/index.php?option=com_content&task=view&id=9753&Itemid=5821 [accessed on 30 September 2008].

Response to Ooms and Van Damme

Joses Muthuri Kirigia^a & Alimata J Diarra-Nama^a

The thesis of our base paper is that if African Region countries armed themselves with a strategy for weaning themselves off donor funding for health, which is backed up by effective programmes for improving economic efficiency in public

and private expenditure; identifying and pruning unproductive public expenditure; raising additional domestic revenue; creating an enabling environment for private health sector growth; and boosting health development governance to curb corruption, they would have a high probability of succeeding in this century, i.e. in the next 92 years.

In their commentary, Ooms and Van Damme attempt to argue that none of the above-mentioned strategies would singly enable African countries to raise the US\$ 40 per person required to provide an essential package of health interventions. They do not propose an alternative set of strategies that would enable African countries to mobilize the US\$ 40 per capita without depending solely on donor funding. Instead, they make a rallying cry for sustained international health aid.

The commentators mistakenly assumed that our proposed strategies are mutually exclusive. Of course, none of the five strategies alone would be able to raise enough domestic resources needed to wean countries off donor funding. However, our argument is that the five strategies, depending on each country's context, should be implemented in tandem.

Our argument was that 8 countries (Algeria, Angola, Botswana, Gabon, Lesotho, Namibia, Seychelles and South Africa), whose current military spending is above the regional average of US\$ 16 per person, may have scope for savings. Ooms and Van Damme argue that this strategy would not make a difference to Liberia, Madagascar, Malawi, Mozambique, Rwanda, Sao Tome and Principe, Sierra Leone and Zambia. This is tautological since the military expenditure of the latter set of countries is below our assumed US\$ 16 per capita threshold.

Concerning the strategy on raising additional revenue, we argued that 13 countries whose tax share of GDP is less than 15% have scope for raising additional revenue by improving efficiency of their tax administration systems. Commentators argue that countries such as Madagascar and Rwanda would raise merely an additional US\$ 1.5 and US\$ 0.8 per person per year. When multiplied with the total population, those seemingly small figures would yield an additional US\$ 36.15 million per year for Madagascar and US\$ 9.68 million per year for Rwanda. Those amounts are not insignificant in these countries where more than 60% of the population live below the international poverty line of US\$ 1 per person per day.¹

We concur with the WHO Director-General's call for increased and more predictable international aid for Africa which adheres to the principles of the Paris Declaration on Aid Effectiveness.² In our opinion, the effectiveness of international aid should also be judged on the extent to which it helps recipient countries to develop and implement strategies for weaning themselves off external donor funding before the end of this century. ■

Competing interests: None declared.

References

1. UNDP. *Human development report 2007/2008. Fighting climate change: human solidarity in a divided world*. New York: Palgrave MacMillan; 2007.
2. *Paris declaration on aid effectiveness: ownership, harmonization, alignment, results and mutual accountability*. Paris: Organisation for Economic Co-operation and Development; 2005.

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The role of aid in the long term

Felix Masiye^a

At some level, I am in agreement with the opinions expressed by Ooms and Van Damme. There is virtually no dispute that, currently, total health expenditure in Africa falls far below what is required to address the health challenges facing the vast majority of the continent's population. It is also likely that this situation will continue for a long time to come. Thus, Ooms and Van Damme are right in observing that more international donor aid is needed urgently to enable African health systems to meet their health goals. I also concede that some of the proposals made by Kirigia and Diarra-Nama may not make a big impact on resource availability in many African countries in the short term. Therefore, I agree that African countries should not wean themselves from donor aid in the short term.

However, I have just a few points of disagreement with Ooms and van Damme. First, strictly speaking, there is no technical reason why a country with an income of US\$ 366 per capita cannot increase its domestic health spending from US\$ 20 to US\$ 34. Several countries in Africa would possibly increase their per capita total health spending to US\$ 34 and still have a total health expenditure-to-GDP ratio below 10%. It is the value of forgone alternative benefits (as perceived through either collective decision making or unilateral decisions of political authority) that puts a limit on how much a society can spend on health, not some health expenditure-GDP ratio technical limit.

Further, general lessons of experience from parts of east and south-east Asia and Latin America show that, as countries

experience substantial broad-based economic and social progress, greater health funding becomes feasible. Such a situation requires time, but has been realized in these countries within about 20 to 40 years. Furthermore, one could argue that achieving independence from donor aid does not mean that external aid should not contribute anything at all to financing health care in Africa. Even rapidly growing economies like China are still recipients of aid from donors such as the Global Fund to Fight AIDS, Tuberculosis and Malaria.

With regard to corruption, if, as has been demonstrated by a number of public health expenditure tracking surveys in Sierra Leone, Uganda and Zambia, a large proportion of disbursed resources do not reach the intended service facilities, there will always be a perceived need for more money because population health indicators would remain dismal. This then might suggest that countries would perceive a funding gap (to be filled by an appeal to donor aid) even if countries were spending US\$ 34 per capita of their own resources. As indicated in the WHO Statistical Information System,¹ Zambia's total health expenditure per capita in 2005 was US\$ 36. It cannot be ignored that productivity of health spending is also important. Overall, it is my belief that it would take a long time to reduce the high dependency on donor aid. But Africa's strategic vision should be to progressively increase domestic resource mobilization. ■

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References

1. WHO Statistical Information System. Geneva: WHO; 2008. Available from: <http://www.who.int/whosis/en/index.html> [accessed on 30 September 2008].

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