
Original Article

Securing support for eye health policy in low- and middle-income countries: Identifying stakeholders through a multi-level analysis

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Abstract This article empirically evaluates advocacy in low- and middle-income countries as a key tool for raising policy priority and securing high-level decision maker support in eye health. We used a unique data set based on a survey conducted by World Health Organization in 2011 on eye care and prevention of blindness in 82 low- and middle-income countries. The theoretical framework derives from the idea that a plethora of stakeholders at local and global level pressure national governments, acting in economic and the political spheres. Previously, eye care has not been investigated in such a framework. We found structural differences across countries with different income levels and proposed policy recommendations to secure high-level decision makers' support for promoting eye health. Three case studies suggest that, in order to secure more support and resources for eye health, domestic and international stakeholders must strengthen their engagement with ministries of health at political and above all economic levels.

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Introduction

The World Health Organization¹ (WHO) estimates the number of people worldwide with visual impairment to be 285 million; most reside in low- and middle-income countries. This figure, along with other

studies at the end of the first decade of the second millennium, have helped increase awareness of this enormous problem worldwide. Surveys show a recent downward trend in cases of blindness and visual impairment (where surveys have been repeated over time), an improvement largely owing to progress in socio-economic development.

Many recent studies have attempted to assess the economic value of eye health, or prevention of impairments and blindness, providing sound analyses and rather convincing arguments in support of public investment in effective interventions. There are two kinds of investigations:

- Those showing how lack of governmental programmes for eye health could easily result in high costs, both for ill people and for the society as a whole, with costs ranging from 0.45 to 0.60 per cent of a country's gross domestic product (GDP).²⁻⁴
- Those showing how adoption of measures to fight blindness and visual impairment would involve costs lower than the benefits associated with implementing such eye health policies. These studies quantify economic returns of eye-care investment programmes, showing a rate of return of 20 per cent to national economies.^{3,5}

Governments in low- and middle-income countries, along with international partners can: (i) improve the quality and quantity of eye-care services, and (ii) develop national eye-health systems. Both are essential for fighting visual impairment and avoidable blindness. Current efforts are insufficient. To intensify and coordinate existing activities, especially in low- and middle-income countries, WHO developed an *Action Plan for Prevention of Avoidable Blindness and Visual Impairments* that sets out five objectives for the period 2009–2013.

The first calls for actions to 'Strengthen advocacy to increase Member States' political, financial, and technical commitment in order to eliminate avoidable blindness and visual impairment'. (In May 2013, the World Health Assembly approved the 2014–2019 Action Plan.) Indeed, studies conducted in other health-related fields show how efforts to shape effective policy measures must rely on input of both state and non-state actors.⁶ Similar studies investigating such collaborative efforts to shape eye health had not been conducted extensively among low- and middle-income countries. This article attempts to address this gap – at a moment when much attention has been devoted to eye health, both by international and national organizations.



Below we assess involvement of national governments in eye health policy in low- and middle-income countries and explore key actions for securing high-level decision makers' support for promoting eye health. We analyse which agents are most helpful for shaping policy processes and influencing decision makers to commit themselves to eye health. We carry out this analysis to establish an analytic framework and to understand processes through which ideas, knowledge, interests, power, and institutions influence decision makers.⁷

Since the mid-1990s, with the rise of globalization, scholars have realized that policymaking results from the interaction of stakeholders and interests, some outside national borders.^{8,9} The private sector has emerged as an indispensable holder of knowledge and capital, also joining in creation of private–public partnerships.¹⁰

The main actors in eye health include:

- *Political stakeholders*: State agencies (including executive and decision-making branches) and the WHO (as an inter-governmental agency), with a specific mandate from 193 countries to devise health policies and provide guidance.
- *Knowledge and technology stakeholders*: Individual experts, elements of the pharmaceutical industry, research institutes (national and international), and professional associations.
- *Financial stakeholders*: Donors and creditors (mainly International Monetary Fund and World Bank).
- *End-user stakeholders*: Mainly society (including local government, groups that lobby, civil society, health-system professionals).
- *International organizations through agreements and action plans, agencies and non-governmental organizations (NGOs)*: Such as, the Action Plan for the Prevention of Avoidable Blindness and Visual Impairment, International Agency for the Prevention of Blindness, International NGOs, International Council of Ophthalmology, The World Blind Union.

In the methods section below, we introduce an analytic framework and the data used (from WHO surveys). We analyse these data (in Results), then introduce three case studies (Mexico, Pakistan, and Kenya) in our Discussion as the basis for formulating policy recommendations based on the framework, the surveys, and the case studies.

Methodology: Policy Analysis Framework and Multi-Level Model

Our policy analysis framework¹¹ encompasses a multi-level approach,¹² as the many stakeholders exert pressure on national governments at *local* and *global* levels, acting through *economic* and *political* channels illustrated in a pressure matrix in Figure 1.

Stakeholders acting locally can exert pressure on political or economic areas – for example, on health professionals’ efforts to shape local population’s expectations and knowledge (political area) or to steer budget allocations (economic area). Local factors (income, availability of affordable health services along with epidemiologic information to help planning) might influence policymakers’ decisions. In addition, global stakeholders’ (international donors and foreign investors) decisions about financial support for specific projects may affect national governments’ decisions.

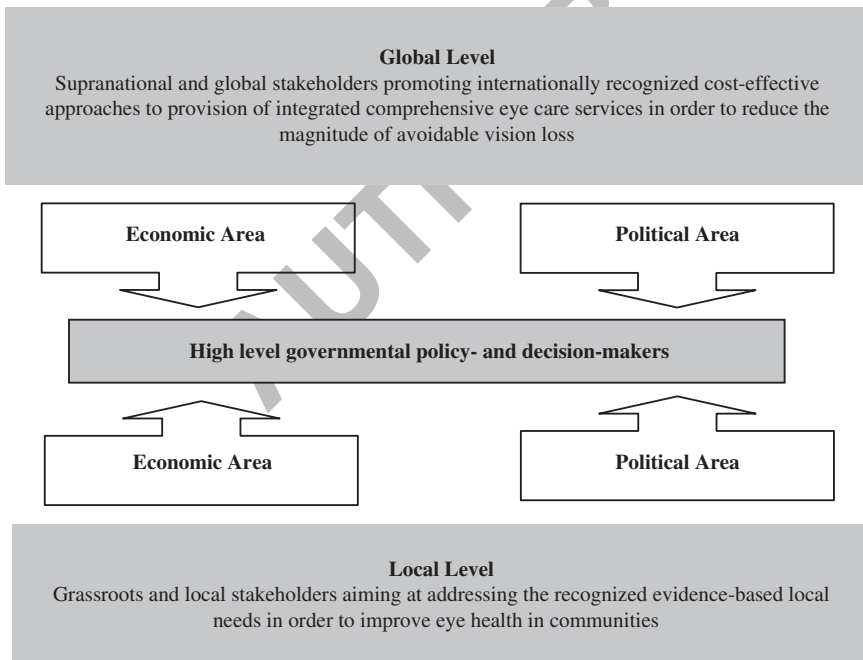


Figure 1: A multi-level framework for agenda-setting.



Using the pressure matrix above, we propose a classification of levels of support:

- *High support*: Support is lacking from only one level (local or global) or one area (economic or political). The policy action required in this case should aim at stimulating pressure from the missing level or area.
- *Unbalanced support*: Pressure comes both from the local and the global levels, but is oriented towards only one area (economic or political). External intervention might be required to stimulate advocacy activities (local and global) targeting the missing area. In another unbalanced scenario, pressure comes exclusively from the global or the local level.
- *Low support*: Pressure comes from a single level and targets a single area. This situation requires more extensive policy action at both levels to foster awareness and advocacy.

The Data Set

To obtain updated information on prevention of blindness and provision of eye care, in 2011 WHO distributed two questionnaires to 121 ministries of health in Member States where WHO had a representative. (WHO's 'Prevention of Blindness and Deafness Team' distributed the questionnaires as part of the Action Plan for the Prevention of Avoidable Blindness and Visual Impairment.) One questionnaire captured views of the officers responsible for policy and decision making for eye care and prevention of blindness at the Ministry of Health (MoH). It included 10 Yes/No questions on relevant activities at the national level. We used these answers to infer policymakers' intentions and perceptions of national policies. WHO directed its second questionnaire to national technical coordinators for prevention of blindness; it consisted of 15 closed- or open-ended questions. Unfortunately, WHO did not similarly query NGOs or grassroots associations for additional perspectives.

The second questionnaire provides information we consider particularly useful – on experiences and achievements in securing support and commitment to promoting blindness prevention and eye health. Coding the data for statistical analysis from open questions required

extensive effort. This coding process also involved the loss of some country-specific qualitative information, which could not be coded and transformed into quantitative data.

Both questionnaires asked respondents how countries made national decisions on investing in eye health, how governments work with other stakeholders, and how these stakeholders engage with one another and governments to secure commitment and support from top decision makers for prevention of blindness and eye health.

We classify countries into categories according to 2009 GDP per capita, using the World Bank Atlas method: Low-Income Countries (LIC), US\$995 or less; Lower Middle-Income Countries (LMIC), \$996–\$3945; Upper Middle-Income Countries (UMIC), \$3946–\$12 195. The average response rate was 47 per cent for the questionnaire addressed to policymakers and 67 per cent for that addressed to technical staff. The low response rates may undermine the representativeness of responses, but we believe that the wide and quite even geographic distribution and economic variation among respondents provides a useful basis for assessing the current situation of eye health policy in low- and middle-income countries. No better data exist on which to base such an assessment (see Table 1 for the distribution of geographical regions per income groups).

Results

In the next two subsections, we identify the stakeholders and describe their involvement in several activities, then use a pressure matrix tool to classify them according to the type of pressure they exert on the policy-making process.

Table 1: Distribution of geographical regions per income groups according to the 2009 per capita GDP

<i>Percentage of our sample</i>	29.3 (%)	45.1 (%)	25.6 (%)
Region	UMIC	LMIC	LIC
Africa (%)	14.3	21.6	62.5
America (%)	61.9	13.5	4.2
Eastern Mediterranean (%)	14.3	29.7	8.3
South East Asia (%)	—	18.9	16.7
West Pacific (%)	9.5	16.2	8.3



Stakeholder analysis: Assessing the current situation

National Committee for the prevention of blindness

The National Committee is a key institution for issuing and developing a plan for prevention of blindness, the main tool used by the policymakers. In 80, 56, and 52 per cent of the UMIC, LMIC, and LICs, respectively, the National Committee is the main authority in charge of devising blindness prevention policies at national level. Data on the composition of National Committees show that across the three income groups of countries, the MoH, along with NGOs and eye health-care professionals, account for half of the members. For LICs, foundations, volunteer organizations, and WHO are among the most important groups for deciding national policy for blindness prevention. The importance of these groups in LMIC and UMIC is much less, where in some cases the private sector plays a more significant role.

Institutions financing, planning, and providing support in eye-care services

Figure 2 shows that United Nations' agencies, NGOs, foundations, and volunteer organizations play fundamental roles in LMICs, as do church-related organizations that typically provide consumables and medicines. Development banks also engage importantly in LICs. The private sector plays an important role only in UMIC. Indeed, LIC and LMIC share

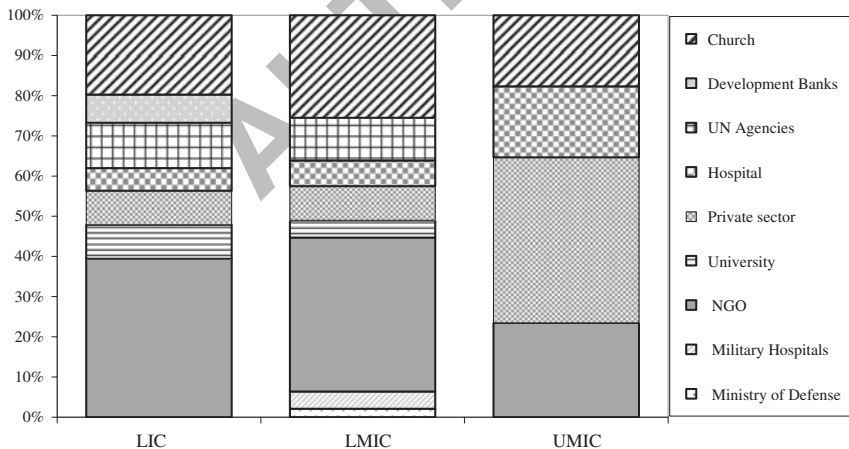


Figure 2: Institutions involved in financing, planning, and providing eye-care services.

several common environmental characteristics including poorly developed institutional capacity, a shortage of administrative and contract writing skills, and poorly developed markets that decrease the likelihood of effective and significant involvement of the private sector.¹³

Institutions involved in the prevention of blindness and awareness raising

Figure 3 indicates that, independent of a country’s income category, along with the MoH, NGOs are the main stakeholders involved in prevention of blindness. In UMICs, support of hospitals and academic institutions, as well as of the National Committee for the Prevention of Blindness, is fundamental. Figure 4 illustrates that WHO and NGOs are by far the most important stakeholders in international partnerships. WHO is especially relevant for UMIC, whereas NGOs are the main international partners of LIC and LMIC.

Institutions involved in international cooperation

Respondents report that international cooperation is crucial for the prevention of blindness, in particular in LIC and LMIC. In fact, 75 and 85 per cent of LIC and LMIC, respectively, report having received

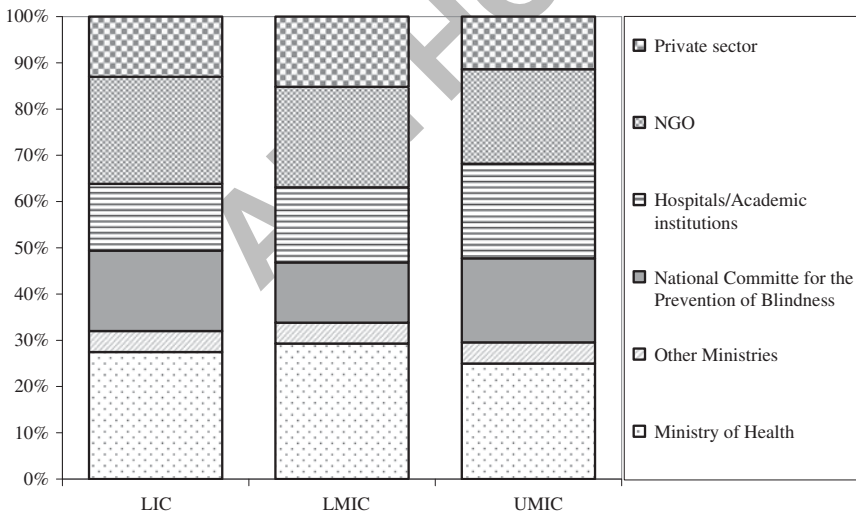


Figure 3: Institutions involved in the prevention of blindness (that is, financing, planning, and provision of eye-care services).

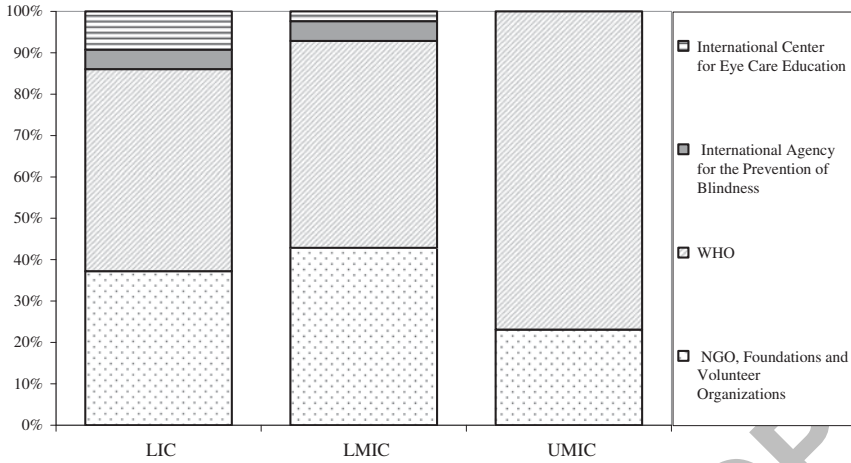


Figure 4: International partnerships to raise awareness on the prevention of blindness.

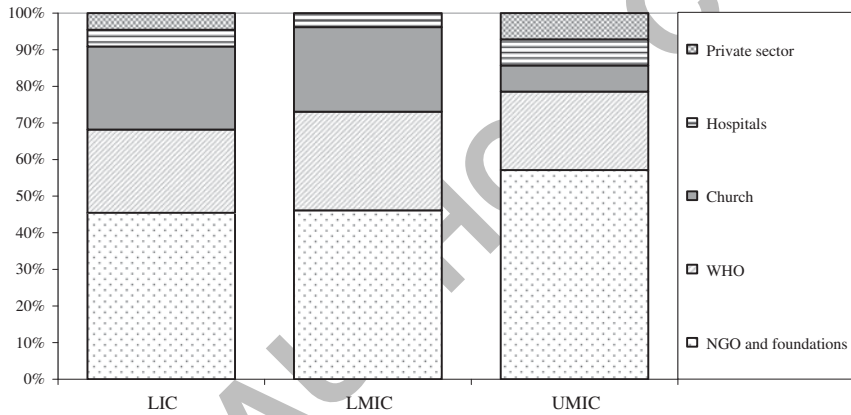


Figure 5: Institutions involved in international cooperation for the prevention of blindness.

support from international partners but only 32 per cent of UMIC have reported having received support from international partners. Figure 5 shows NGOs, foundations, and volunteer organizations, as well as WHO and its local offices, to be most relevant – regardless of the country’s income category. In LIC and LMIC, the churches are important supporters. Types of support vary: stakeholders in UMICs focus on technical support and in LMICs focus on technical and financial

support. For LICs, these same organizations provide substantial support for infrastructure and training of personnel.

This finding is consistent with the well-documented and vital role of churches in offering assistance to poor and marginalized people in developing countries since the late nineteenth century. Despite their historical role in advocacy, churches have tended to work in isolation from other civil society actors, thereby undermining their own activities. Churches and other national and international actors need to seek mutual collaboration for more effective interventions. As documented in a study on churches' role in advocacy in Africa,¹⁴ collaborative work among church and other non-church organizations (trade unions in Zambia, a legal institute in Kenya, and a wide range of civil society organizations that together formed the Public Affairs Committee in Malawi) magnified the impact beyond what the churches had on their own.

For assessing collaboration, it is important to note whether religious and NGOs act alone or unbeknown to MoHs. In the past, relevant government departments (often MoHs) shaped policies and strategies with the support of WHO. MoHs then implemented the policies through government programmes. As part of the implementation process, governments and WHO guided religious and non-religious NGOs to where they could apply their resources and offer services. Such a top-down approach is not necessarily entirely practical because MoHs may lack resources, and the goals of MoHs and NGOs may differ.

Pressure matrix and support-level scenarios

Having identified the main stakeholders, we classify them using the pressure matrix according to level and area of action. This helps us define the corresponding level of support for each income group. We add a third group to the political and economic area actors by including institutions that combine economic and political activities such as professional associations, national aid agencies, and local universities and hospitals.

Low-income countries

Table 2 shows unbalanced support for LICs, as pressure comes mainly from global actors in most areas of stakeholder involvement.

The National Committees' purely economic stakeholders are rarely involved at both global and local levels. Global and local stakeholders engage in financing, planning, and providing for blindness prevention.

**Table 2:** LIC: Pressure matrix and support-level scenarios

<i>Stakeholders' involvement</i>	<i>National Committee membership</i>		<i>Financing, planning, and providing for blindness prevention</i>		<i>Awareness raising</i>		<i>International cooperation</i>		
	<i>Local (%)</i>	<i>Global (%)</i>	<i>Local (%)</i>	<i>Global (%)</i>	<i>Local (%)</i>	<i>Global (%)</i>	<i>Local (%)</i>	<i>Global (%)</i>	
Level of action	63	37	48	52	19	81	35	65	
Area of action	Economic	—	10	19	20	17	33	20	12
	Political	48	42	67	65	75	50	65	65
	Economic and political	52	48	14	15	5	17	15	23
Level of support	Unbalanced		Unbalanced		Unbalanced		Low		

Both global and local stakeholders' activities are biased towards the political area. As for raising awareness, LICs are especially weak at the local level – a lack of financial resources locally creates a corresponding need for economic activities undertaken by global stakeholders. Because local stakeholders are key for securing policy support, specific actions are needed to promote their participation in promoting eye health education locally and stimulating local NGO and local community stakeholder involvement through capacity building activities. Global stakeholders play the most significant roles in international cooperation, exerting pressure mainly on the political area.

Lower middle-income countries

Table 3 shows similarly unbalanced support for LMICs. Stakeholders at local and global levels are biased towards the political area and the economic area is weak.

Economic stakeholders in the National Committees are particularly weak at the global level. Conversely, the most relevant stakeholders in financing, planning, and providing for blindness prevention are those acting in the global context, and specifically global institutions focused on politically oriented activities. Local stakeholders are instead oriented towards economic activities or a combination of the two. Because involvement of local- and economic-oriented stakeholders is

Table 3: LMIC: Pressure matrix and support-level scenarios

<i>Stakeholders' involvement</i>	<i>National Committee membership</i>		<i>Financing, planning, and providing for blindness prevention</i>		<i>Awareness raising</i>		<i>International cooperation</i>	
	<i>Local (%)</i>	<i>Global (%)</i>	<i>Local (%)</i>	<i>Global (%)</i>	<i>Local (%)</i>	<i>Global (%)</i>	<i>Local (%)</i>	<i>Global (%)</i>
Level of action	74	26	39	61	9	91	14	86
Area of action	Economic	12	—	5	12	—	4	—
	Political	38	29	46	75	100	88	100
	Economic and political	50	71	49	13	—	8	—
Level of support	Unbalanced		Unbalanced		Unbalanced		Low	

weakest, their involvement needs promotion through systematic identification of local and global stakeholders who could be part of eye health care or contribute by helping to address the economic aspects of implementing blindness prevention policies. This recommendation is even more relevant in awareness raising and international cooperation activities, where the contribution of local and economic oriented is nearly non-existent. In LICs, raising awareness involves mainly global stakeholders. Stakeholders acting at local and global level focus in the political area, with almost no economic-oriented activities. Similarly, for international cooperation, the most striking results emerge at local level, where all stakeholders involved act exclusively on the political area.

Upper middle-income countries

Table 4 shows a good support in UMIC, but there remains room for improvement. National Committee members are most frequently local stakeholders who conduct politically oriented activities; the economic area is poorly represented at global and local levels. Thus, action to involve economic-oriented stakeholders is needed. In contrast to LICs and LMICs, in UMICs local stakeholders are more important in financing, planning, and providing for blindness prevention. Local stakeholders are much more active in political and economic areas. It will be useful for policies to encourage involvement of local stakeholders in global

**Table 4:** UMIC: Pressure matrix and support-level scenarios

<i>Stakeholders' involvement</i>	<i>National Committee membership</i>		<i>Financing, planning, and providing for blindness prevention</i>		<i>Awareness raising</i>		<i>International cooperation</i>		
	<i>Local (%)</i>	<i>Global (%)</i>	<i>Local (%)</i>	<i>Global (%)</i>	<i>Local (%)</i>	<i>Global (%)</i>	<i>Local (%)</i>	<i>Global (%)</i>	
Level of action	69	31	71	29	20	80	30	70	
Area of action	Economic	—	—	43	43	—	—	33	13
	Political	44	43	57	50	100	80	50	47
	Economic and political	56	57	—	7	—	20	17	40
Level of support	Unbalanced		High		Low		Partial/high		

partnerships, and global presence in provision and financing of services. Interventions to raise awareness will be crucial, as involvement of economic-oriented stakeholders is exceptionally low. Finally, global stakeholders are largely involved in activities related to international cooperation, exerting their pressure mainly on the political area.

From Theory to Practice – Case Studies and Discussion

Here, we illustrate successful collaboration for improving eye health through three case studies based on a recent WHO policy report.¹⁵ Each of the case studies illustrates one of the three income groups (UMIC, LMIC, and LIC). Next, we provide a roadmap for eye-care policy, having in mind these best practices in securing more support and resources for eye health.

Case studies

Mexico (UMIC)

Since 2000, the national government has increased eye-care support. Local practising ophthalmologists have engaged more in public health approaches and service provision, prevention of blindness, with advocacy led by the Mexican Society of Ophthalmology.

The National Committee for the Prevention of Blindness and the local blindness prevention community have successfully raised public awareness and drawn attention and investment from policymakers and local

philanthropists. The national government now reimburses a portion of cataract operations through a national insurance programme, with additional financing from the private sector. A ‘retinopathy of prematurity’ group worked with the government on a national prevention and treatment policy, and many hospitals and maternal and childcare centres take part – it is now a successful programme. Other targeted efforts include a trachoma programme in Chiapas, a river blindness programme that has nearly eliminated this disease in Chiapas and Oaxaca, and various independent programmes for uncorrected refractive error.

Pakistan (LMIC)

In 1988, the prevalence of blindness in Pakistan was 1.78 per cent (as found in a national population-based eye survey). As a result, in 1994 the MoH formed a National Committee for the prevention of blindness, that then formulated a plan to integrate primary eye care into primary health care, established the Pakistan Institute of Community Ophthalmology, and formulated district eye-care programmes.

In 2002, the prevalence of blindness had fallen to 0.9 per cent. In 2004, Pakistani ophthalmologists founded the Punjab Institute of Preventive Ophthalmology (now the College of Ophthalmology and Allied Vision Sciences). In the latest national plan for the prevention of blindness (2005–2010), the national government has increased resources, upgrading eye departments in district hospitals at all government levels and recognizing eye care as a prevention and health promotion strategy. As a result, there was a threefold increase in outpatient attendance rates and the number of cataract surgeries increased almost fourfold.¹⁶ Health departments have also started allocating money for prevention of blindness programmes, particularly focusing on recruiting and training the staff to carry out the programmes, disease control, and prevention of childhood blindness (2719 new positions were created). The government, supported by a number of international partners and the private sector, is now the driving force for improving Pakistanis’ eye health.

Kenya (LIC)

In 2001, NGOs joined forces under the global initiative Vision 2020 and, in partnership with the Government, committed themselves to



strengthening blindness prevention. Shortly afterwards, the MoH created a division of ophthalmic services to formulate policy, plan, and deliver services, including personnel training and recruitment. The number of ophthalmologists increased from approximately 50 in 2000 to 85 in 2012. A senior government official chairs a working group, including NGO representatives, to guide the development and implementation of national eye health plans. Effective collaboration has led to international support for the national programme.

Governmental and non-governmental partners together advocate for resources to support eye care. Examples include activities on World Sight Day, World Health Day, and effective use of international experts to advocate for prevention with senior officials and parliamentarians. The trachoma elimination programme was instrumental in bringing groups together to improve a specific area of eye health and engage with colleagues outside eye care.

A Roadmap for Policy Formulations

As the case studies suggest, a successful collaboration requires local and global stakeholders to strengthen their engagement with MoHs at both political and economic levels. Local and global stakeholders often work in synergy: local entities are likely to have better understanding of the needs and aspirations of the domestic community and information on the resources that are available and those that are needed, whereas global stakeholders can contribute to technical and financial support.

Activities essential for securing decision makers' support for eye health include:

- First, stakeholders must understand who are their key partners in order to agree to and pursue common goals to optimize individual and collective efforts.
- Then, for other stakeholders to secure support of policymakers, they must identify clear, practical opportunities for engaging with individuals and organizations involved in policy development. Opportunities emerge in committees, permanent fora, roundtable discussions, and specific activity spheres.
- Finally, stakeholders must work to establish clear accountability, with clear milestones and measures of input, output, and impact, which are

important. When something is measured and monitored, it is more likely to be done.

Lessons and Conclusion

We assessed the current level of low- and middle-income countries' national governments' involvement in eye health policy and identified best strategies to raise awareness of the relevance of eye health for economic, social, and political purposes.

Our empirical investigation reveals structural differences across countries at different income levels. LICs are weak at the local level, particularly with economic-oriented actors and actions; thus, we recommend that these countries promote more local networks. Specifically, local actors and international organizations need to collaborate more, especially where religious and NGOs may frequently act alone or unbeknown to MoHs. Historically, where MoHs (often with the support of WHO) set policies for applying their resources and services, these guide investments and service allocation by religious groups and NGOs.¹⁷ We did not find evidence for such a top-down approach any more.

The most crucial weakness of LMICs is scarce involvement of economic-oriented actors at local and global levels. Policy actions in LMIC need to create awareness among local groups to be able to exert pressure in the economic area and involve (global and local) stakeholders from the private sector in the decision-making process. Finally, UMIC show very strong stakeholder presence and activity in financing, planning, and providing for blindness prevention, but substantially reduced presence of economic-oriented actors. In aggregate our information indicates a need for country-level policies, especially for creating awareness locally and globally.

The case studies suggest that securing more support and resources for eye health will require domestic and international stakeholders to strengthen engagement with MoHs in political area, and especially in the economic one. Domestic and international stakeholders often work in synergy: domestic entities are likely to have better understanding of the local community's needs and aspirations and information about resources available or needed, whereas international stakeholders can offer technical and financial support.

Undertaking the specified steps might crucially reduce blindness and its associated social and economic burden. Indeed, reducing avoidable



blindness in low- and middle-low income countries might ultimately help lift a large portion of population out of extreme poverty. Thus, implementation of the identified measures can contribute substantially to achieve many of the Millennium Development Goals.¹⁸

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References

1. World Health Organization. (2011) Fact Sheet No. 282, October, <http://www.who.int/mediacentre/factsheets/fs282/en/>, June 2012.
2. Centre for Eye Research Australia. (2004) Clear Insight: The Economic Impact and Cost of Vision Loss in Australia. An Overview of the Report Prepared by Access Economics Pty Ltd. Melbourne, Australia: Centre for Eye Research Australia.
3. Access Economics. (2009) *The Economic Impact of Visual Impairment in the UK Adult Population* London, UK: Access Economics.
4. Metcalfe, J. (2010) The economic argument for VISION 2020. In: R. Paddy (ed.) *IAPB 2010 Report: The International Agency for the Prevention of Blindness (IAPB)*. London: London School of Hygiene and Tropical Medicine.
5. Kim, A. and Benton, B. (2005) *Cost-Benefit Analysis of Onchocerciasis Control Program*. Washington DC: The World Bank.
6. Tantivess, S. and Walt, G. (2008) The role of state and non-state actors in the policy process: The contribution of policy networks to the scale-up of antiretroviral therapy in Thailand. *Health Policy and Planning* 23(5): 328–338.
7. Gilson, L. and Raphaely, N. (2008) The terrain of health policy analysis in low and middle income countries: A review of published literature 1994–2007. *Health Policy Plan* 23(5): 294–307.
8. Buse, K., Mays, N. and Walt, G. (2005) *Making Health Policy*. Milton Keynes, UK: Open University Press.
9. Keck, M.E. and Sikkink, K. (1998) *Activists Beyond Borders*. Ithaca, NY: Cornell University Press.
10. Hajer, M.A. and Wagenaar, H. (eds.) (2003) *Deliberative Policy Analysis*. Cambridge, UK: Cambridge University Press.
11. Walt, G., Shiffman, J., Schneider, H., Murray, S.F., Brugha, R. and Gilson, L. (2008) ‘Doing’ health policy analysis: Methodological and conceptual reflections and challenges. *Health Policy and Planning* 23(5): 308–317.
12. Lopolito, A., Morone, P. and Sisto, R. (2011) Innovation niches and socio-technical transition: A case study of bio-refinery production. *Futures* 43(1): 27–38.
13. Palmer, N. (2000) The use of private-sector contracts for primary health care: Theory, evidence and lessons for low-income and middle-income countries. *Bulletin of the World Health Organization* 78(6): 821–829.
14. Gibbs, S. and Ajulu, D. (1999) The role of the church in advocacy: Case studies from Southern and Eastern Africa. The INTRAC Occasional Papers Series.
15. World Health Organization. (2012) Investing in eye health: Securing the support of decision-makers, <http://www.who.int/blindness/Politicalanalysis.pdf>, June 2012.



16. Khan, A.A., Khan, N.U., Bile, K.M. and Awan, H. (2010) Creating synergies for health systems strengthening through partnerships in Pakistan – A case study of the national eye health programme. *Eastern Mediterranean Health Journal* 16(5): s61–s68.
17. Iversen, P.B. (1998) Collaboration between NGOs, ministries of health and WHO in drug distribution and supply. EDM Research Series No. 027.
18. Faal, H. and Gilbert, C. (2007) Convincing governments to act: VISION 2020 and the millennium development goals. *Community Eye Health Journal* 20(64): 62–64.

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