The Place of Policy in Applied Health Care and Technology with Special Reference to African Traditional Medicine

**Daniel Noni Lantum** 

Published by the African Technology Policy Studies Network, P.O. Box 10081, 00100 General Post Office, Nairobi, Kenya.
© 2007 African Technology Policy Studies Network (ATPS)
PUBLISHED BY ATPS COMMUNICATIONS DEPARTMENT Printed by Newtec Concepts P.O. Box 00800, Westlands 14180 Nairobi, Kenya
Tel: 4449849, Fax: 4450399 newtec@mitsumi.net
ISBN: 9966-916-74-1

#### ABOUT THE AFRICAN TECHNOLOGY POLICY STUDIES NETWORK

The African Technology Policy Studies Network (ATPS) is a multi-disciplinary network of researchers, policy makers, actors in the private sector and other end users interested in generating, promoting and strengthening innovative science and technology policies in Africa. With a regional secretariat in Nairobi, the network operates through national chapters in 23 countries, with an expansion plan to cover the entire sub-Saharan Africa.

One of the objectives of the network is to disseminate research results to policy makers, legislators, the organized private sector, civil society, mass media and farmers' groups through publications, dialogue and advocacy. Among its range of publications are the Working Paper Series (WPS), Research Paper Series (RPS), Special Paper Series (SPS) and the Technopolicy Briefs.

Papers published under the ATPS Special Paper Series are those commissioned as concept papers, think pieces, leading conference papers and keynote addresses. In keeping with our knowledge brokerage function, ATPS publishes, with permission of the author(s) or journal editors, papers (published or unpublished) produced by distinguished academics/ researchers for a different purpose but judged by ATPS to be of excellent quality. These papers address significant policy questions relevant to the work of ATPS and/or support the Southern voice or an African perspective. We also consider theoretical papers that advance our knowledge of science and technology policy issues.

ATPS is supported by a growing number of donors including the International Development Research Centre (IDRC), the Carnegie Corporation of New York, the Rockefeller Foundation, the World Bank, the OPEC Fund, Ford Foundation, Coca-Cola Eastern Africa, the African Development Bank, *Info*Dev, European Union and the Royal Dutch Government.

### **Acronyms**

AU African Union

CAMES Conseil Africain et Malgache pour l'Enseignement Superieur

CESAG Centre African d'Etudes Superieures en Gestion COHRED Council on Health Research for Development

ENHR Essential National Health Research

FEMNET African Women's Development and Communication Network

MDGs Millennium Development Goals

NEPAD New Partnership for African Development

PRSP Poverty Reduction Strategy Papers

UNICEF United Nations International Children's Fund

WHA World Health Assembly WHO World Health Organizations

# **Table of Contents**

1.	Introduction	1
2.	Raison D'etre of Policy	3
3.	Epistemology of Policy	5
4	The Role of International Policies in the Restoration of	
	Traditional Medicine of Africa	7
5	Recent Advances in Policy on Traditional Medicine in Africa	11
6	More Policies for the Future	13
Refer	16	

### Introduction

George Rosen (1958) in his book, "A History of Public Health" wrote:

"Throughout human history, the major problems of health that mankind has faced have been concerned with community life, for instance, the control of transmissible disease, the control and improvement of the physical environment (sanitation), the provision of water and food of good quality and in sufficient supply, the provision of medical care, and the relief of disability and destitution. The relative emphasis placed on each of these problems has varied from time to time, but they are all closely related, and from them has come public health as we know it today" (p. 25).

Further, in his preface, George Rosen asserts prescriptively that:

"The protection and promotion of the health and welfare of its citizens is considered to be one of the most important functions of the modern state. This function is the embodiment of a public policy based on political, economic, social, and ethical consideration;" p. 17 (emphasis, author's) and it determines the ethics, attitudes and actions of society towards illness condition and its environment throughout history.

For the present meeting the author was assigned the task of addressing the role of policy in applied health technology with special reference to African traditional medicine. Perhaps what is intriguing in this theme is that despite the fact that African traditional medicine is by its anthropological nature a heritage of African peoples and nations, it has paradoxically been the object of chains of successive policies aimed at reviving and revitalizing it to regain its recognition and liberation for open practice in the context of socio-political and cultural modernization in emergent African society. As such this paradox becomes the "problematique" or central thesis to be examined in this paper. Seen and solidified in time and space dimensions, the paradox assumes the form of a dumb-bell-shaped phenomenon with the first big bump representing the pre-colonial era - when it was the only medicine of the people; then follows the truncation representing the thinning down due to the squeeze of colonial policy pressures, which continued into the early independence era for many countries; and then swells the second bump (not as big as the first), which represents the return or authorization of Traditional medicine as a public utility in modern states. This dumb-bell-shaped phenomenon is veritably the creation of policies and counter-policies by the leadership or policy makers at the

international, national and local scenes, and it is the interaction of these policies, which we will focus upon as the central theme of this discourse. However, it appears pertinent to first examine in depth the raison d'être and the epistemology of policy; then study the role of international policy in the restoration of traditional medicine; following, we will review the recent advances of traditional medicine in Africa; identify and highlight policies for the future; and conclude.

### 2. Raison D'etre of Policy

The guest for development and social welfare is instinctive in man. Anthropological investigations of the most elementary human societies have revealed to us that human groups or societies always sought and created leaders (either individuals – kings, princes, potentates – or collective groups) to serve as principal policy-planners and decision-makers to stir and guide their collective development and welfare. This leadership later became institutionalized to what we call in modern terms 'government bodies' or simply 'governments', and the institution was the depository or collective authority, which was above that of any other within the jurisdiction of that society or community. The totality of guidelines for regulation of collective development and social welfare constitute the policy frame or laws of the group. As the global human society is guite vast and stratified, it is imaginable that there must be several levels of policy, each carrying the weight of authority commensurate with the status of the instance that issued it. However, we can summarize the diversity into a simple hierarchy for our purpose as follows international community, national, local policy institutions. The international community, represented by the United Nations Organizations and its agencies is the supreme policy organ; the nation/state issues policies for its national territory and for citizens belonging to it de juré, but national policies are subject to those of the global body; the local authorities within the context of national policies re-interpret and adapt them in form of local policies or official orders and decisions. As such, global policies are resolutions adopted at statutory meetings and conventions held for specific purposes, and are always written and classified. National policies are derived through ratification of international conventions by parliament and by laws adopted by parliament and enacted by Heads of State. In respect for the National Constitution, the Head of State (or Chief Executive) can issue decrees, ministers can issue Ministerial Orders, and local responsibles can issue local decisions to guide public behaviour and action for the public good. Occasionally, in public speeches, leaders of government may reveal their operative intentions and wishes (not yet written), which carry the force of policy by dint of their authoritative source. Hence, those charged with the responsibility of implementation of policy must be critical about the authority of its origin, the spirit and the context in which it was issued and the extent and limitation of the policy in terms of jurisdiction, timing and the public good or welfare that was intended.

For purposes of development and advancement of human welfare, it is important, even imperative that policies must be relevant; policies must be well conceived; best based on evidence; implementers must be adequately knowledgeable and competent; programmes of implementation must follow a stated management design with inbuilt monitoring systems and objectives. As such, it would appear that a policy statement, which remains at the level of the desire or wish, is not yet complete until the

appropriate management implementation strategy has been formulated as its essential component. Similarly a policy goal will not be achieved if the implementers lack the know-how and the management capacity to implement it. Policy formulation rather than being the beginning ought to be indeed the end of adequate studies and reflection, which have not only tested the methodology and produced reproducible results, but discussed the findings in light of comparable experiences or experiments elsewhere, and drawn logical conclusions. This is the scientific evidence basis. Nevertheless, some characteristic and inspired individuals have occasionally come up with suggested policy guidelines that saved the course of nations in face of catastrophes. These should be the exceptions rather than the rule, and consequences should be quickly studied and anticipated by those to administer it. As the development process in organized human communities is indeed a chain of development policies in time and place, all policies are inter-related; and their overlaps and linkages must be clear to the planners during the planning and review processes.

## 3. Epistemology of Policy

If Africa has come this far in the resurrection of its productive genius and know-how thanks to policy, it was worth it and it is quite indicated to study the nature of policy to boost our future development potential. It is now evident that good governance is the skillful management of policy pools, which constitute the raison d'être of governments as institutions for protection, inspiration, and coordination of the development process for the promotion of the welfare of peoples. Policies are their eyes or search lights to see far into the darkness of universal possibilities of human advancement and progress. By nature, policies are linked like chains and interwoven like a lace-fabric of the fisherman's net; and as such the end of one policy is the beginning of another, and the networks of policies are like those of blood capillaries, which channel the flow of energy into the vital human organs, and eventually into the entire body system, to sustain life and vitality. Therefore, institutions that generate policies and coordinate policy implementation ought to be polyvalent, multitalented, multidisciplinary, given to research, and inspired by history, which provides the meaningful understanding of the past to provide solutions for the present and the future.

The wisdom of the ages has led peoples to define and encapsulate nation/state policy in their 'national constitution' – the basic law of the land – the mother policy, from which derive sub-policies that define socio-political institutions of governance. Frank Grad's "Public Health Law Manual" explains it well for the United States of America. The authority of the United Nations derives from the collective submission to this global body to promote peace and security for all. There was a call for total moral integrity and goodwill for those called to design and formulate policy at any level, with the objectivity of fairness and, justice to all, and respect of fundamental rights of man – the raison d'être of the United Nations.

With regards the evolution of the traditional medicine, through the last century, we will observe how colonial rash or biased theories influenced policy enactment targeted to its virtual elimination. We will also observe how, based on sold evidence, these colonial policies were gradually dismantled thanks to the superior policies of the international community. The lesson of solid evidence-base has dawned on us as the modus operandi, and compelled us to adopt the scientific approach of establishing evidence as the modern torch light, and it is this belief that led participants at Professor Mohammed Khalil Timamy's lecture on "Can Economic Recovery Occur Without Science and Technology" at the ATPS conference in Nairobi to respond:

- □ Scientists should implement what they believe in
- □ Scientists should sell their ideas to the government

The private sector should participate in national issues by setting up
performance benchmarks
The link between policy makers and research and development institutions should be
strengthened
The Kenyan government should have a clear policy on research and innovations
Institutional networking should be encouraged.

As policy is goal-oriented and targets goals through objectives, it is by its nature limited in time and space; that is, any policy does not last for ever. As such the formulation and implementation of policy must have in-built provision for monitoring and evaluation of its course and effects so that the accumulated evidence of outcomes should contribute to its end and new policy. When more than one policy target the same common interest, there tends to be a conflict – a situation of conflicting and antagonistic policies – and all should be reviewed and synchronized, or the baseless one scrapped. As we have seen, if the people for whom policies are enacted were often duly involved in the conception and enactment, policies would be more realistic and productive or effective in attaining the desired objectives. This remains for many developing African countries ruled by dictators, self-proclaimed leaders of imperialism and neo-colonialism, and those who shunted up to power by coup de force, a real challenge to lasting development in all fronts since the evidence-base, moral rectitude of policy-makers, the *summum bonum* or supreme good of the people under that policy jurisdiction, may not be considered at all.

We will see how the policies of colonialism were counter-policied by the international community to liberate the suffocating Traditional medicines.

# 4. The Role of International Policies in the Restoration of Traditional Medicine of Africa

Recalling to the dumb-bell-shaped evolution of African traditional medicine, we had stated that the pre-colonial era witnessed African traditional medicine in its full bloom, as it was part of a people's culture without any alternative or competing medicinal system. The colonial rule, which was indeed a cultural invasion brought along new 'western culture' of which allopathic or conventional medicine, developed on scientific basis, was an essential component to protect and heal its progenitors primarily and then the colonized people subsequently. As of policy in all colonies, the imported medicinal system was instituted as part and parcel of the government administration with a budget, to the utter exclusion of indigenous medicine. Thus, whereas the former developed and expanded, the latter declined and dwindled, and only certain hard and fast socio-economic and cultural factors sustained elements of it in clandestiny, hence the truncation in the dumb-bell. One scientific minded European, Dr Louis Paul Aujoulat, lamented aloud:

It is worth observing that traditional medicine is largely based on empirical knowledge, and although its health-promotive, diagnostic, therapeutic and rehabilitative powers have been proven over the centuries, it could definitely improve its efficacy, safety, and scope if the rigors of scientific approach were applied to it. It was the WHO Expert Committee in the African Region, which defined it as:

"Traditional medicine is the totality of the knowledge and practices, explicable or otherwise, for diagnosing, preventing or eliminating any (human) disequilibrium, be it physical, mental or social, and which is based exclusively on the experiences lived, observed, and transmitted from generation to generation, either by word of mouth or through writing."

It is sustained in society by the authority of traditional rulers in the context of diverse customary institutions of power sharing and governance. There is no question that it exists under some (usually unwritten) local policy frameworks, which determine its internal regulations and ethics concerning

the informal training of its manpower, their initiation formalities, their practices and compensation, their taboos and even their status in society.

As such, the over-riding policies of the conquering authorities simply swept to under bed the indigenous systems, and would have succeeded in completely suffocating traditional medicine to death, if the allopathic system was 100 percent efficient and efficacious, and could assure coverage for all the population sectors to palpably and satisfactorily reduce morbidity, mortality and prolong life. Of course it failed woefully, and that was the loophole, which attracted international concern and possibilities, thanks to the new conscience and ethic of the League of Nations and subsequently the United Nations from 1945.

A WHO/UNICEF combined study commissioned in 1973 came out with results in February 1975, which were approved early in May 1975 by the UNICEF Executive Board as UNICEF policy, and adopted by the World Health Assembly as Resolution WHA 28.88 in May. The evidence content of these world policies were summarized as follows in "alternative approach to meeting basic health needs in developing countries"

"Despite great efforts by governments and international organizations, the basic health needs of vast numbers of the world's people remain unsatisfied. In many countries less than 15% of the rural population and other underprivileged groups have access to health services. More serious still, these people are both partially exposed and particularly prone to disease. A hostile environment, poverty, ignorance of the causes of disease and of protective measures, lack of health services or inability to seek and use them – all may combine to produce this sorry situation.".... The strategy adopted to meet the main health needs of the underprivileged by many developing countries has been modeled on that of the industrialized countries, but as a strategy, it has been a failure"

On World Poverty and Health, the report states:

"What we know as the developing world, far from being a single homogeneous entity, is made up of a great variety of widely different countries and areas at different stages of development. Nevertheless, their progress is conditioned by certain factors in common, and in some cases it may be possible to consider common solutions to their problems. These problems have complex political, social, cultural and environmental roots. Extremely limited resources, poor communications, vast distances, individual and community poverty, and lack of education act and react upon one another in such a way as to maintain the developing countries in a perpetual state of poverty." (p. 10)

Of special relevance to Africa is that the above joint study included Niger, Nigeria and Tanzania in the study sample. The Investigation of Village Health Workers and Traditional Birth Attendants in Niger;

the study of indigenous medicine (Ayuverda, Yoga, Inani Tibb) in India; the National Socio-economic Development Policy of Tanzania enunciated in 1967 as the ARUSHA Declaration; and, the use of two-way radio in health services delivery in Nigeria were all components of the world wide study. The inclusion of China, where Mao Tsetung in the 1949 Great Liberation policy had imposed the valorization, development and integration of Chinese traditional Medicine into the health care system affords us an opportunity to appreciate benevolent dictatorship as a possible source of health development policy.

The harvest of these national policies to synthesize the above WHO and UNICEF Policies were indeed distant precursors to another historic international health policy called "the *Alma ata* declaration of September 1978" whose immediate antecedent policies consisted of WHO Regional Committees resolutions of 1976 on Primary Health Care, and the WHO policy on Health for all by the year 2000 passed in 1977 by the World Health Assembly. Thus the *Alma ata* declaration of primary health care as the universal approach to achieving health for all by 2000 was indeed the summit of the crescendo of international health policies. For our present purpose, among the components of the health care delivery package, the declaration included traditional medicine and its applied technologies. This was indeed a radical departure from the past repugnant repressions on traditional medicine and countries, especially African, were called upon to resurrect and implement this necessary and available vital resource buried in dormancy by former colonial policy now enshrined in national policies.

The policy battle thus won, the challenges of the near and distant future lay in the application or implementation, and it is surprising to say, in light of the review of country policies on traditional medicine as of 1985 that the reaction and implementation was slow. And this is quite understandable because of standing impediments enshrined in long term bilateral conventions; the need to educate the incumbent health personnel trained in scientific approaches and western technologies; and even the need to awaken, retrain and empower the tradi-practitioners to assume their full functions in a new environment of liberation created by the new public service policies. In other words, there was great need for additional national policy re-orientation between 1978 and 1985, and even thereafter, and this required further international policy assistance. These eventually emerged through the WHO Regional Committee Resolutions, African Union initiative called the New Partnership for African Development (NEPAD), and the United Nations Third Millennium Goals.

We should be happy that the justification for the present conference and workshop "is premised on the fact that in spite of the numerous national, regional and international efforts to address health care challenges in Africa, the continent seems highly unlikely to meet the health-related Millennium Development Goals (MDGs) as well as other targets set out in other key international initiatives, and further, the revealing information that, "Health has been adopted as a priority area for action by the African Heads of States, and that the NEPAD Health Strategy underscores the centrality of health to development and seeks to deepen ownership and responsibility by Africa for measures required to enhance health and the commitment by development partners."

As all public health care actions must be policy-driven and are policy-dependent, we will briefly look at recent country health policies related to traditional medicine in Africa.

# 5. Recent Advances in Policy on Traditional Medicine in Africa

Owing to the scarcity of data collection and of advanced research practices on the subject of traditional medicine in many African countries, it is not possible to be precise on the progress on policy and practice for some countries. However, thanks to the continued effort of the World Health Organization (WHO), general trends for the continent and for some countries have been established. The WHO (2001) "Legal Status of Traditional and Complementary medicine – a Worldwide Review" (15) includes information, though sketchy, on 43 countries. Of these at least 23 countries are quite advanced in their progressive policies, usually legislative or regulatory acts, on the practice of traditional medicine and complementary alternative medicine. These include: Benin, Botswana, Burkina Faso, Congo, Ethiopia, Gambia, Ghana, Lesotho, Madagascar, Mali, Mauritius, Namibia, Niger, Nigeria, Senegal, Sierra Leone, South Africa, Swaziland, Uganda, Tanzania, Zambia and Zimbabwe.

It is quite probable that a lot of progress has also been made in the other unlisted countries. For Cameroon, for example, since the Law 81/12 of 27 November 81 approving the Fifth Five Year Social, Economic and Political Development Plan (1981-1986) provided measures to lay down a joint strategy and method to effectively integrate traditional medicine into the national health plan, there have been other developments in the domain. A service for traditional medicine in the Ministry of Health was created in 1985; an experimental center set up in the Yaounde Central Hospital in 1990; the Centre for the Study of MEDICINAL plants set up within the Institute for Medical research; the authorization for the formation of Tradi-practitioners' Associations since 1990; and the creation of a Direction for Health Services Organization (including Traditional medicine) in the Ministry of Health and reorganized in since August 2002. This direction has already spearheaded the elaboration of a "National Strategic Plan for Traditional Medicine" and initiated a preliminary draft of the LAW organizing the practice of Traditional medicine in Cameroon, as of 15 October 2005, Further, the Cameroon authorities have since 1980 authorized the setting up of three chinese traditional medicine hospitals in Guider, Mbalmayo and Yaounde. From these centers and other installations and clinics for the sale of Chinese drugs are rampant all over the country. A special convention has been signed between the University of Yaounde I and China to promote research valorization and development of traditional medicine. Most significantly, since 31st August 2002, the Ministry of Public Health and the WHO have jointly been organizing the official celebration of "African Days of Traditional Medicine" as a national event.

Some research endeavours, since 1980 have yielded concrete evidence to buttress policy formulation in the traditional medicine domain. The Traditional Healers Census exercise resulted in the

publication of "Traditional Medicine-Men of Cameroon – The Case of Bui Division in 1985;" "Traditional Medicine-Men of MFOUNDI and NYONG ET SOO Division in 1989;" the OAU Scientific and Technical Committee (1996) searched and published "Traditional Medicine and Pharmacopoiea" "The Pros and Cons of Traditional Medicine in Cameroon" was published in (1978 and reprinted in 1984). We must acknowledge the contribution of international cooperation research on traditional medicine in Cameroon even if the works were done principally for international interest. Hence, Eric de Rosny (1974) « Ndimsi – Ceux qui soignent dans la nuit; » Paul Gebauer (1964) « Spider Divination; » Rosemaire Leiderer (1982), La medicine Traditionnelle chez les Bekpak (Bafia) du Cameroun; The long series of « Les Flores du Cameroun » are worthy contributions to Cameroon Traditional Medicine.

This very year 2005, the World Health Organization Centre for Health Development in Kobe, Japan came out with a "Text and a WHO Global Atlas on Traditional Complementary and Alternative Medicine" in which the African region was well represented by Cameroon, Ghana, Kenya, Mozambique, Nigeria, Sudan, Swaziland, Uganda, United Republic of Tanzania. The accounts, which all received official approval from their governments, provide an update on certain selected parameters on the state of traditional medicine in these countries, and are indicative of the general continental trends. For a world policy, the WHO (1998) has laid down prescriptively "la politique et activités de l'OMS" which is a summary of policies developed since 1991 and we should consider that document the road-map for now and the future.

### 6. More Policies for the Future

The NEPAD/ATS structures have already indicated some health priority areas which need to be targeted by appropriate national health and technology policies. It is the personal experience of the present author that tons of useful research reports sit piling up on the listed subjects of malaria, tuberculosis and even HIV/AIDS, which can provide evidence basis for short term policies on the fight against these diseases. The Council on Health Research for Development (COHRED) has, since March 1993, been promoting the concept of Essential National Health Research (ENHR), which aims at assisting countries in identifying their health and research priorities as well as strengthening their research capacities. These are resource institutions to inspire evidence-based policy development, and Uganda, among other countries has made good use to them.

In the domain of African traditional medicine, the Conseil Africain et Malgache pour l'Enseignement Superieur (CAMES), very much on the inspiration of late Professor Alfred Comlan Quenum – former WHO Regional Director for Africa-organized a series of Seminars/workshops on several aspects: ethno-botanical and physico-chemical studies and research on the physiology and chemistry of immaterial aspects of traditional medicine. They held one meeting in 1988 at Bamako (Mali), and subsequently another at Kigali, Rwanda, and in 2004 at Yaounde, Cameroon. Based on these collaborative studies, practical policies through effective legislation or reglementary acts have been regaining its momentum as an important component of health care services, and hold great promise for the future.

Again as the unchallenged forward-looking leader in the domain, the WHO at its fifty-sixth World Health Assembly discussed the WHO Traditional medicine Strategy 2002-2005 and adopted resolution WHO 56.30, setting out squarely as the major challenges: the lack of organized networks of tradi-practitioners; the lack of sound evidence of the safety, efficacy and quality of traditional medicines; the need for measures to ensure proper use and to protect and preserve traditional and natural resources necessary for sustainable application; and measures for training and licensing of traditional practitioners. For action, the strategy details four directions for work with the countries: areas of policy, concerns of safety, efficacy and quality; questions of access in availability and affordability, and modalities of sustainable rational use.

The process of appropriate integration of traditional practitioners will require solid evidence similar to that pioneered by Kenya in integrating women into the macro-economic development structures. According to Mary Wandia of FEMNET, the Poverty Reduction Strategy Papers (PRSP) process

gave the poor an opportunity to give their opinion and share their experiences on poverty. It offered women's organizations an opportunity to work closely with the government for the first time on macro-economic issues, appreciate their capacity and weakness, particularly the capacity on the link between women's poverty and macroeconomic framework and the lack of gender disaggregated data. For 'women' and 'gender' representing a marginalized population sector, we just need to substitute them with 'Traditional practitioners.' Maureen Were and Jane Kiringai in their "Gender Mainstreaming in Macro economic Policies and Poverty reduction in Kenya" have beautifully presented "Gender and Fiscal Policy" which is relevant for tradi-practitioners, as well as highlighted parallel domains with policy implications for traditional medicine. It is pleasing to the author to observe that in the formulation of the "Cameroon National Policy on Psycho-social Management of HIV Infected Persons / AIDS Patients and their close associates," the non-professional social groups participating included religious persons, tradi-practitioners, community leaders, traditional birth attendants and family members.

The recent official adoption of an old Chinese traditional medicine plant – Artemesther or Qinghaosu and its derivaties as the new strategy for both the preventive and curative treatment of malaria following its growing resistance to common conventional drugs like Chloroquine, must be saluted as a forward – looking policy, which paves the way for wider exploitation of natural traditional medicine resources abundant in different African ecologic regions and industrially producing them. Plantations of Artemesther now thrive in many African countries.

In the management of health services, the "Centre African d'Etudes Superieures en Gestion" (CESAG) based in Dakar (Senegal) has already enshrined in their syllabus – a section: "Management of Medicaments and Biomedical Equipments". Health law, which treats the presentation and analysis of laws and regulations requiring the organization and functioning of health services in African countries and the administrative management of health delivery services, is offered as specialization unit.

The above-cited cases must be considered in their just value as the tip of the iceberg, and with more profound studies, one will definitely find mines of information on recent advances suitable for the health and technological policy development in African countries.

### 7. Conclusion

It was George Rosen (1958) an eminent public health historian who observed:

"For a variety of reasons, a large part of the world – in Asia, in Africa, in the Middle East – stopped developing economically, politically, and scientifically around 1400, just about the time that the Western nations entered upon a period of extraordinary growth in these areas. As a result, it is only today that Asian and African peoples are beginning to effect the far-reaching changes necessary to bridge the gap of centuries, and the importance of this development for public health is considered in its implications for the future."p.18

Yes indeed, African people must be warned against the same errors of the middle ages when imperial colonialism radically stopped their growth and creativity by making them consumers of imported cultures and ideas, which carry different appellations in different epochs: modernism, privileged partnership, paternalism and recently globalization. That is how Africa lost the established civilization of the Nubians in the Nile Basin; the Kingdom of Munhumutapa in the Zambezi region of Central South Africa; the Ancient Congo Kingdoms ruled by Mani Dynasty in 15th Century; the Songhai, Ghana and Mossi Empires of the sub-Saharan regions of tropical Africa. It was simply due to the absence or loss of development policy and the adoption of the policy of consumerism of ideas. goods and technology from the exterior. No matter how underdeveloped and backward, the policy options of today for total African development must be comprehensive and supportive of creativity; that is, the investment of the entire native genius into conception, concretization and application of solutions to their life problems in their human ecologies. That is, Africans must resolve to participate in globalization, in several domains, but particularly in health care services and technology. We have the natural ecologic potential and need only correct policies such as those initiated by the World Health Organization, to contribute more effectively in an improved scientific manner to health delivery for AFRICA AND THE WORLD. This is the Third way in African Philosophy (according to Olisegun Oladipo) (38)

### References

- George Rosen (1958), A History of Public Health, M.D. Monographs on Medical History N° One, MD Publications Inc. New York.
- Michael Aletum: Introduction to General Sociology (Polycopy) See MAX Weber's Rational Legitimacy to Authority. University of Yaounde, faculty of Laws and Economics (p 57)
- Charles B. Nam (1968) POPULATION AND SOCIETY, Houghton Mifflin Coy Boston, New York p 652 Unwritten Policies are sometimes referred to as officially expressed "interest" or concerns.
- Moa Tsetung's "Liberation in 1949" Policy brought a successful revolution, thanks to radical reforms, reorganizing the value of traditional Chinese medicine (see Djukaviovic et all (1975) p 36.
- Philippe Denis (2004) Dominicans in Africa: A History of the Dominican Friars Sub-Saharan" Cluster Publications, Pietermaritzburg.
- Dr Paul Aujulat, cited by Noah ZinguiJacques in his "Memoire poul la Maitrise en santé Publique, Université Libre de Bruxelles, 1975-1976 p 183
- OMS (1976) Medecine Traditionelle Africaine, Serie de rapports Techniques AFRO, N° 1, Brazzaville, 1976.
- WHO (1975), Eds Djukanovic and Mac E.P., « Alternative Approach to Meeting Basic Health Needs in Developing Countries A Joint UNICEF/WHO Study, Geneve.
- OMS/FISE (1978), Les Soins de Sante Primaires6rapport de la Conference Internationale ALMA-ATA, 6-12 SEPTEMBRE 1978, Geneve, p 70
- WHO (1977) Regional Committees passed Resolutions on Primary Health care, long in preparation for ALMA ATA. (see OMS/FISE 1978 p 12)
- NEPAD (see Ajaga NIi (2004) Why People Remain Poor, De Scholar Press, p 114
- UN Millennium Development Goals (see Ajaga Nli (2004) Why People Remain Poor, De Scholar Press, p 112.
- NEPAD/ATS Proposal to Hold a Joint Conference and Workshop: Science and Technology and Health Innovation Systems in Africa.
- Frank P Grad (1965) Public Health Law Manual, American Public Health Association, Inc, USA.
- WHO (2001) Legal Status of Traditional Medicine, and Complimentary/Alternative Medicine a World Review, WHO, Geneva pp 5-42.
- LAW Nº 81/12 of 27 November 1981 approving the fifth five year Social, Economic and Political Development Plan (1981-1986) Section 16-1;3.1.5 on integrating Traditional medicine.
- Decree N°95/040 of 7 March 1995 organizing the Ministry of Public Health
- MPH (October 2005) LAW on Recognition and Organization of Traditional Medicine In Cameroon and Ethical Principles of Practice (First draft)

- Universite" de Yaounde I (2005) Decision Nº 05-437 UYI/VR-RC of 23 May 2003, implementing the Creation and Organizing of a UNIT for Training Research and Valorization of Medicinal Plans and for Traditional Medicine Applications.
- Dr Daniel Lantum (1985) Traditional Medicine-Men of Cameroon: The Case of Bui Division P.H. Unit, Univ of Yaounde I
- Dr Daniel Lantum (1989) Traditional Medicine-Men of Mfoundi, Nyong et Soo, Divisions P.H. Unit, Univ of Yaounde.
- Comite Scientifique et Technique de OAU (1996) Traditional Medicine and Pharmacopoeia: Contribution to Ethnobotanical and Floristic Studies In Cameroon, CNPM, PORTO NOVA.
- Daniel Lantum (1978) « The Pros and Cons of Traditional Medicine » ABBIA, Cameroon Cultural review N°s34-35-36-37
- ERIC de Rosny (1974) Ceux Qui Soignent dans la Nuit, Etudes et Documents Africains, EDITIONS CLE. Yaounde.
- Paul Gebauer, (1964) Spider Divination, Public Museum Publications in Anthropology, No 10 1964 Milwaukee
- Rosemaire Leiderer (1982), la Medecine Traditionelle Chez les BEKPAK (Bafia) du cameroun, vol I & II collectanea Instituti Anthropos, Haus Volker and Kulturen. D-5205 Sankt Augustin 1, 1982.
- OMS (1998) Reglementation des Medicaments a Base de Plantes, la Situation dans le Monde WHO/TRM/98.0 See Politique et Activités de l'OMS, pp 2-4.
- WHO (2005) WHO Global Atlas on Complementary and Alternative Medicine; WHO Centre for Health Development, Japan, Kobe (Text and Map volumes)
- COHRED: Research into Action, N° 13 April-June 1998, Capacity Development for Health Research A Perspective from Uganda, by CD/ENHR Study Team.
- UNHRO is reported in p 4 of COHRED, Issue 13 April-June 1998 p 4
- CAMES (1985) Rapport D'activites du Cames, Bamako 4 6 Mars 1985.
- CESAG, Centre Africain d'Etudes Supérieurs en Gestion, Dept Gestion des Services de santé, CESAG, Dakar, Senegal p 8.
- Mary Wandia (Eds L.M Wanyeki and A Patel ? 2004) The Process of Integrating Gender in the PRS Process in Kenya and the Challenges Encountered by the Gender Lobby Groups, FEMNET/ GTZ.
- Maureen Were and Jane Kiringai (2004), Gender Mainstreaming in Macro Economic Policies and Poverty Reduction Strategy in Kenya, FEMNET/GTZ
- MPH (1995) National Policy on the Psycho-Social Management of HIV Infected Persons/Aids Patients and their Close Associates (or Counseling) WHO/GTZ Yaoundé.
- MPH (JAN 2004) Rapport de L'atelier de Consensus National sur le Traitement de Paludisme, MSP/GTC, Comite National Roll back malaria.
- ATP News, N° 15 Jan-Jun 2004, « Can Economic Recovery Occur Without Science and Technology » pp 6-7.
- Olusegun Oladipo (2002), The Third Way in Africa Philosophy, Essays in Honour of Kwasi Wiredu, Hope Publications, Ibadan, NIGERIA.

#### Other Publications in the ATPS Special Paper Series

Special Paper Series 1

Globalization and Technology: Africa's Participation and Perspectives: Concept Paper and Research Agenda by Melvin Ayogu &Osita Ogbu (2002)

Special Paper Series 2

Globalization, Markets for Technology and the Relevance of Innovation Policies in Developing Economies by Sunil Mani (2002)

Special Paper Series 3

Biotechnology in sub-Saharan Africa: Towards a Policy Research Agenda by John Mugabe (2000)

Special Paper Series 4

The Impact of Globalization in sub-Saharan Africa Countries by Mwindaace N. Siamwiza (2002)

Special Paper Series 5

A Blueprint for Developing National ICT Policy in Africa by Clement Dzidonu2002

Special Paper Series 6

Impact of Foreign Direct Investment (FDI) on Technology Transfer in Africa by Moses M. Ikiara (2002)

Special Paper Series 7

Pursuing Technology Policy Research in sub-Saharan Africa: Reflections on the Dimensions, Applications and Implications of a Methodological Framework by M.H. Khalil-Timamy (2002)

Special Paper Series 8

African Response to the Information Communication Technology Revolution by G. Olalere Ajayi (2002)

Special Paper Series 9

Information and Communication Technologies (ICTs): Poverty Alleviation and Universal Access Policies by Andrew Dymond & Sonja Oestmann (2002)

Special Paper Series 10

ICT Human Resource Development in Africa: Challenges, Strategies and Options by T.M. Waema (2002).

Special Paper Series 11

Applications of ICTs in Africa: Development of Knowledge Workers in Centres of Learning by John Muraguri Waibochi (2002).

Special Paper Series 12

State of Science and Technology Capacity in sub-Saharan Africa by Khalil-Timamy (2002).

Special Paper Series 13

Strengthening National Information and Cmmunication Technology Policy in Africa: Governance, Equity and Institutional Issues by Melvin Ayogu

Special Paper Series 14

A Science Agenda from An Afrian Perspective by Turner T. Isoun

Special Paper Series 15

International Trends in Modern Bio-technology: Entry by and Implications for African Countries by John Mugabe

Special Paper Series 16

Foreign Direct Investment (FDI), technology Transfer and Poverty Alleviation: Africa's Hopes and Dilemma by Moses Ikiara

Special Paper Series 17

Global Governance of Technology and Africa's Global Inclusion by Banji Oyeyinka

Special Paper Series 18

Science and Technology and Poverty Reduction Strategy in Sub-Saharan Africa by O. Akin Adubifa

Special Paper Series 19

An Assessment of Science and Technology Capacity Building in sub-Saharan Africa by O. Akin Adubifa

Special Paper Series 20

Network as Determinants of Manufacturing SME Cluster Growth in Nigeria Networking Technical Change and Industrialization: The Case of Small and Medium Firm in Nigeria by Banji Oyelaran-Oyeyinka

Special Paper Series 21

Technology Transfer in a Globalizing World: Many Promises, Lack of Responsibility, and Challenges for Africa by M.H. Khalil Timamy

Special Paper Series 22

Integrated Value Mapping for Sustainable River Basin Management by Kevin Urama

Special Paper Series 23

Wastewater and Irrigated Agriculture Lessons Learned and Possible Applications in Africa by Frans Huibers, Lucas Seghezzo and Adriaan Mels

Special Paper Series 24

Survey of Indigenous Water Management and Coping Mechanisms in Africa: Implications for Knowledge and Technology Policy by Femi Olokesusi

Special Paper Series 25

Survey of Indigenous Water Management and Coping Mechanisms in Africa: Implications for Knowledge and Technology Policy by Femi Olokesusi

Special Paper Series 26

Water Management and Conflict in Africa: The Role of Management and Technology by Chris Huggins

Special Paper Series 27

Markets, Institutions and Agricultural Performance in Africa by Julius Mangisoni

Special Paper Series 28

The Biotechnology Revolution and its Implication for Food Security in Africa by Victor Konde

Special Paper Series 29

Why Africa has Fallen Short of Building Dynamic Agro-processing Capabilities: Constrains, Options and Prospects by Wellington A. Otieno and Ada Mwangola

Special Paper Series 30

Promotion of Public Health Care Using African Indigenous Knowledge Systems and Implications for IPR: Experiences from Southern and Eastern Africa by Hassan O. Kaya

For more information on this series and ATPS Contact:

The Executive Director
The African Technology Policy Studies Network
3rd Floor, The Chancery, Valley Road
P.O. Box 10081 00100 General Post Office
Nairobi, Kenya

Tel: +254-020-2714092/168/498 Fax: +254-020-2714028 Email: info@atpsnet.org Website: http://www.atpsnet.org