

POLICY VOICES SERIES

Africa Research Institute



MODERN AFRICAN REMEDIES
HERBAL MEDICINE AND COMMUNITY DEVELOPMENT IN NIGERIA

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AUTHOR

Many individuals have contributed to this publication, but particular recognition is due to Father Anselm Adodo OSB.

Anselm is the founder and director of Nigeria's foremost herbal research institute, the Paxherbals Clinic and Research Laboratories, and a Fellow of the Nigerian Society of Botanists. He is a prominent advocate of African herbal medicine, indigenous knowledge and health policy reform in Africa.

A Benedictine monk, theologian and social scientist, Anselm was born in Akure, Ondo State. He has a BA in Religious Studies from the University of Nigeria, Nsukka; an MA in Systematic Theology from Duquesne University, USA; and an MSc in Medical Sociology from the University of Benin, Edo State. He is currently a doctoral student in management of technology and innovation systems with the Da Vinci Institute in South Africa.

Anselm has more than 20 years' experience of research and lecturing on topics as diverse as the phenomenology and history of religions, the theology of the liturgy, anthropology, ethnobotany, ethnography and medical sociology. He is a certified colour therapist, medical herbalist, public health consultant, and health systems technologist. He has authored a number of books, including: *Herbs for Healing* (1997), *Healing Radiance of the Soul* (2003), *New Frontiers in African Medicine* (2005), *Herbal Medicine and the Revival of African Civilization* (2010) and the best-selling *Nature Power*, first published in 2010 and revised and reprinted more than eight times.

THE POLICY VOICES SERIES

The *Policy Voices* series highlights instances of group or individual achievement. The publications are collaborations between Africa Research Institute (ARI) and leading practitioners in sub-Saharan Africa, which seek to inform policy through first-hand knowledge and experience.

In publishing these case stories, ARI seeks to identify the factors that lie behind successful interventions, and to draw policy lessons from individual experience.

The series also seeks to encourage competing ideas, discussion and debate. The views expressed in the *Policy Voices* series are those of the author and other contributors.

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1: INTRODUCTION

Mention Nigerian herbal medicine, even in the country itself, and you are likely to induce a raised eyebrow. Altering the perception of herbal medicine from that of a parochial, outdated practice to a resource with considerable potential to improve health care and rural development needs in contemporary Nigeria is no straightforward task.

Paxherbals was founded in 1996 by a Benedictine monk, Father Anselm Adodo, in Edo, the Nigerian state most closely associated with herbal medicine. The natural remedies it manufactures are accessible and affordable. Based at the monastery in Ewu, "Pax" has become a business with more than 100 full-time employees, a modern laboratory, multi-million-naira (₦) annual sales, nationwide distribution through a network of 1,000 authorised distributors, and clinics in Lagos and Jos. Its growth has been entirely self-financed.

As a thriving rural enterprise and industry leader, Pax is regarded in Edo State – and much further afield – as an undoubted success story, one of which the monastic and local communities are justifiably proud. Success has been a joint endeavour. While Pax has created many jobs in its factory and laboratories, and economic opportunities through its local supply chain, local communities are suppliers of knowledge, skills and raw materials. They are also consumers. Pax is firmly rooted in, and the product of, its surroundings.

Father Anselm and his team have made a mission of demonstrating how traditional herbal medicines can be a force for innovation and progress in health care. In the Pax context, "traditional" means a great deal more than "old". It alludes to the way in which valuable indigenous knowledge has been conceived, preserved and transmitted. This knowledge, and respect for long-established customs and cultural practices, is revered at Pax.

At the same time, its professional, transparent and scientific approach is the antithesis of quackery. Pax routinely collaborates with practitioners of orthodox medicine and universities. With more than 30 government-certified products, including the best-selling Paxherbals Bitters, the business has succeeded in building trust and diminishing sceptical or outdated perceptions of natural remedies.

Africa is experiencing rapid growth of both infectious and chronic diseases. It is estimated that by 2020 there will be 60 million people suffering

from hypertension and 19 million diabetics.¹ The World Health Organization (WHO) has forecast that by 2030 more Africans will die from non-communicable diseases than from infectious ones such as HIV/AIDS, malaria and tuberculosis. These are threats which few, if any, state health care systems are equipped to cope with.

Health indicators for Nigeria, the country with the largest population in Africa, are a microcosm of those for the continent. Despite its middle-income status, in many regions – and particularly in rural areas – the formal health system cannot provide even a rudimentary level of care. In 2012, government expenditure on health care accounted for just 6.1% of gross domestic product (GDP), despite Nigeria being a signatory to the 2001 Abuja Declaration to spend at least 15% of GDP on health care.

The consequences of a wholly inadequate health budget are readily discernible. A maternal mortality rate of 560 per 100,000 live births compares poorly with South Africa, Nigeria's rival for economic pre-eminence, and even with regional neighbour Ghana. Less than 15% of the population has regular access to modern health care facilities.² According to World Bank data, Nigeria had just 1.6 nurses and 0.91 community health workers per 1,000 people in 2010.

In Edo State, there is one traditional healer for every 110 people³. Anecdotal evidence collected by ARI in Nigeria suggests that as many as two-thirds of Nigerians use traditional medicines, often in combination with orthodox drugs. Natural remedies remain very much accepted by the population at large. In Nigeria, but also globally, there is growing recognition of the need to integrate traditional medicine into mainstream health systems to bolster their ability to cope with an ever-increasing burden.

In 1970, only 12 countries worldwide had national institutes for traditional medicine.⁴ By 2013 there were 28 such institutions in Africa alone.⁵ "Integrative" health care is now recognised and supported by WHO. China is just one example of a successfully integrated health care system in which traditional and orthodox medicine are practised in tandem at every level. The Chinese government accords equal importance and emphasis to both "streams"; a large and active research community focuses on enhancing integrative medicine.⁶ This is the kind of model that Paxherbals considers appropriate – and viable – for Nigeria. But its realisation will require active endorsement and oversight by government.

ORTHODOX, TRADITIONAL AND AFRICAN MEDICINE – SOME DEFINITIONS

According to the UK's National Cancer Research Institute, **orthodox medicine** is a system in which medical doctors and other healthcare professionals (such as nurses, pharmacists and therapists) treat symptoms and diseases using drugs, radiation or surgery.

Nigeria's Traditional Medicine Policy (2007) defines **traditional medicine** as the total combination of knowledge and practices, whether explicable or not, used in diagnosing, preventing or eliminating physical, mental or social diseases, and which may rely exclusively on past experience and observation handed down from generation to generation, verbally or in writing.

Father Anselm Adodo prefers the term "**African medicine**" to "traditional medicine". He defines African medicine as a system of healing grounded in an African world view, culture and accumulated beliefs and practices, which proffers solutions to physical and spiritual ailments through the use of herbs and other plants. African medicine is founded on indigenous, biological and medico-spiritual theories and concepts of the human body; the role of the individual as a member of the community; and their relationship with the community, with the environment and with nature.

This is not a pipe dream: Ghana has made great strides, as Dr Peter Arhin, Director of Traditional and Alternative Medicine at the Ghanaian Ministry of Health, explains on page 15.

The Paxherbals narrative is compelling. The business is unrecognisable from its seemingly inauspicious beginnings in a wooden hut in the grounds of a monastery, two decades ago. Through patience, determination and good practice it has become an exemplar in its market and is exerting increasing influence where it ought to be heeded – in government, academia and among medical practitioners. In so doing, it has the implicit backing of WHO, an influential ally, and the West African Health Organisation, headquartered in Burkina Faso.

There are other, equally important, strands to the narrative. In a country with more than

5 million unemployed young people and 1.8 million new graduates looking for jobs each year, Paxherbals' achievements are a clear reminder of the unexploited potential of small and medium-sized enterprises as creators of employment, opportunity and income security.

Oil revenue has historically provided 75–80% of Nigeria's budget. A period of deflated oil prices provides the perfect backdrop for new federal and state governments to actively promote economic diversification. Thriving domestic traditional medicine and pharmaceutical industries could be fostered in Nigeria; and the transformation that Paxherbals and the local community have brought about in Ewu could be typical, rather than exceptional. Indigenous knowledge, resources and enterprise remain under-exploited.

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¹ "Pharmaceutical Manufacturing Plan for Africa to Facilitate the Local Production of Medicines in Africa", Campaign on Accelerated Reduction of Maternal Newborn and Child Mortality in Africa, 28 November 2013.

² T. Adefolajau, "Traditional medicine in the health care delivery system of Nigeria: issues and contexts", *International Journal of Business and Social Sciences*, July 2014, Vol. 2, No.3.

³ T. Adefolajau, "Traditional and orthodox medical systems in Nigeria: the imperative of a synthesis", *American Journal of Health Research*, 2014, Vol.2, No.4, p.121.

⁴ P. Shetty, "Integrating modern and traditional medicine: Facts and figures", *SciDev.Net*, 30 June 2010.

⁵ "Enhancing the role of traditional medicines in health systems: A strategy for the African region", WHO – Regional Committee for Africa, 3 September 2013.

⁶ Shetty, "Integrating modern and traditional medicine: Facts and figures".

THE ALMA-ATA DECLARATION, THE WORLD HEALTH ORGANIZATION AND THE AFRICAN UNION: A GLOBAL STRATEGY FOR INTEGRATIVE HEALTH

“For many millions of people, often living in rural areas of developing countries, herbal medicines, traditional treatments and traditional practitioners are the main – sometimes the only – source of healthcare...this is care that is close to homes, accessible and affordable.”

Margaret Chan, Director General of the World Health Organization, 2008¹

The 1978 Alma-Ata Declaration was the first formal recognition by the World Health Organization (WHO) and its member states of the role that traditional medicine and its practitioners can play in primary health care. The Declaration eventually led to the development of WHO Traditional Medicine Strategy: 2002–05, which set out the potential benefits of integrating traditional medicine into orthodox health care systems.

Traditional medicine featured in WHO’s Medicines Strategies for 2004–07 and 2008–13. In 2009, a World Health Assembly Resolution identified traditional medicine as one of the sources of primary health care and a key contributor to the achievement of the Millennium Development Goals.² By initiating a global dialogue about the role of traditional medicine in health care, WHO took on a leading role in changing perceptions and aims to foster the “integration, regulation and supervision” of traditional medicines, and “to develop a proactive policy towards this important – and often vibrant and expanding – part of health care”.

The decision to launch a second Traditional Medicine Strategy, for 2014–23, confirmed that it is viewed by WHO as a mainstay of health care. The strategy has three key objectives:

1. Build a knowledge base that will allow traditional and complementary medicine (T&CM) to be managed actively through appropriate national policies that understand and recognise the role and potential of T&CM.
2. Strengthen the quality assurance, safety, proper use and effectiveness of T&CM by regulating products, practices and practitioners through T&CM education and training, skills development, services and therapies.

3. Promote universal health coverage by integrating T&CM services into health service delivery and self-health care by capitalising on their potential contribution to the improvement of health services and health outcomes, and by ensuring users are able to make informed choices about self-care.

Crucially, the strategy recognises the growing economic importance of traditional medicine.

In 2000 the Organization of African Unity (OAU), now the African Union, agreed at a meeting in Zambia to declare 2001–10 the “Decade of African Traditional Medicine.” This recognised the significant contribution that traditional medicine could make to sustainable development in health, well-being, poverty alleviation and job creation.

In 1999, eight African countries had traditional medicine policies. Ten years later, the number had grown to 39. Over the same period, 18 countries adopted national health strategic plans that incorporated traditional medicine.³

Each year, 31 August is African Traditional Medicine Day. In 2014 the theme for events throughout the continent was “Collaboration between Traditional Medicines Health Practitioners and Conventional Medicines Health Practitioners”.

¹ M. Chan, “Address at WHO Congress on Traditional Medicine”, People’s Republic of China, 2008.

² Sixty-Second World Health Assembly Declaration on Traditional Medicine 22 May 2009, WHA62.13.

³ “Progress Report on Decade of Traditional Medicine in the African Region”, World Health Organization, 5 July 2011.

PAXHERBALS – A TIMELINE

October 1996 – Construction completed of the first Paxherbals “centre”: a wooden hut in Ewu adjacent to the monastery, costing US\$200.

December 1996 – Sale of the first product to the general public, a cough syrup.

April 1997 – Opening of the first Paxherbals distributor, in Lagos State.

July 1997 – Formation of the Association of Paxherbals Health Care Providers and Distributors.

March 2000 – Publication of *Nature Power* by Father Anselm Adodo. The bestselling book sought to demystify traditional medicine practice in contemporary Nigeria and to recast it as explicit, rational and science-based.

June 2000 – Official opening of the new clinic building and factory in Ewu.

2000 – Paxherbals Bitters launched. Bitters and four other products certified by the National Agency for Food and Drug Administration and Control (NAFDAC) in 2004.

August 2004 – First national congress of the Association of Paxherbals Health Care Providers and Distributors.

May 2006 – Official opening of the Ewu research laboratory complex by Chief Lucky Nosakhare Igbinedion, Governor of Edo State (1999-2007).

November 2010 – Official opening of Paxherbals Natural Medicine and Pharmacovigilance Centre in Lagos State.

2012 – Commissioning of Paxherbals herbarium. It now contains more than 1,000 plant specimens.

August 2012 – Paxherbals National Congress in Benin City, Edo State, attended by more than 800 distributors.

June 2013 – Publication of *Disease and Dietary Patterns in Edo Central* by Father Anselm Adodo, the first publication in a new Paxherbals research series.

November 2014 – Father Anselm Adodo’s first weekly column in *The New Telegraph*

2: MONASTIC ORIGINS

 Father Anselm Adodo OSB

When I came to the St Benedict Monastery of Ewu, Edo State, in 1987, it was the peace and tranquillity of the natural environment that really struck me. My parents had arranged for my university enrolment but I, like St. Benedict himself in his youth, did not relish the idea of a modern, overly Westernised university. I joined the monastery instead and studied philosophy and theology. When I was growing up I was never a member of the Catholic Church, though the church I attended was Catholic. Rather than assume doctrine without question, I forged my own personal beliefs about religion and I found the monastery to be closer to the original sense of Christianity.

In the early 1990s, I undertook my first study of how people survive based on what they have: indigenous knowledge. I travelled around the whole of Nigeria and was amazed by what I observed. I saw the native traditional healers, and how they struggled, but also how they treated and cured people. I felt called to preserve their knowledge. They were not writing anything down, but what they knew was too valuable to lose.

I made a commitment to start documenting herbal remedies. I tried to explain to the traditional healers I encountered that this was the only way their knowledge would survive. The time had come to move it from implicit knowledge, passed from one generation to the next, to explicit knowledge that was documented and shared more widely. In doing so, people could build on it.

I believe that nature has granted us the tools to prepare life-saving medications from its herbs and grasses, but that this potency must be verified. In 1996, there was no body or institution in Nigeria to authenticate the value of herbal medicine or to preserve indigenous knowledge. I was determined to try and fill that void, at least partially.

The creation of Paxherbals at the monastery in 1996 was the result of this desire to experience and express nature in a rational way. In deciding a name for the company I simply wanted to convey the idea that peace must first come from within. I believe you cannot create health without inner peace. Wholeness and well-being are the products of peace and harmony within, brought about by healing. Cancer, for example, is a manifestation of disharmony. The logo we use, hands clasped together in prayer, is an extension of the concept. It signifies that, despite our commitment to science,

we are spiritual. Being spiritual is different to being religious. I want to make that distinction.

Ensuring that the monastery was part of the venture from the outset was crucial, but not easy. There was opposition initially, but over time the monastic community was able to overcome its concerns that herbal medicine was *juju*.¹ Now many brothers are extremely supportive and about half of them are involved in the day-to-day operations. The monastery is one of the few in Africa that is financially stable, mainly due to Paxherbals.

Over the years, the production of drugs and number of people employed grew considerably. Paxherbals evolved into a professional enterprise. In 2006, we opened our ultra-modern research laboratories. We employ more than half a dozen qualified scientists, three of whom are from Edo State. All the expansion has been self-funded. There is a synergy with our immediate neighbours: the community of Ewu. They have come to identify with us. Paxherbals is not a stranger or a foreign body. I am regarded as part of the community, although I was not born in the area.


We constantly remind the local community of the paramount importance of maintaining a connection to the soil. As a society, a nation, we are in danger of losing that connection in Nigeria. By reconnecting people with nature, Paxherbals strives to bring

them back to health. This might seem very philosophical, but being clear about the purpose of a project gives it a greater chance of succeeding. The philosophy we have at Paxherbals – greatly influenced by the Rule of St Benedict – has driven us to where we are today. It stems from a faith in the value of herbal medicine and is underpinned by a belief in the relevance of indigenous knowledge for community transformation.

Our philosophy has meant that we have grown independently of the orthodox, government health system. I do not believe that herbal medicine should be integrated with orthodox medicine in the sense of being welded together. This sort of integration usually means the smaller one comes under the shadow of the bigger one, and the bigger one will eventually swallow the smaller one. Instead, integration should occur in a way that is balanced and encourages cohesive growth and development.

I also believe that health care is a service, first and foremost. Our view is that providing the service to people should be the primary objective; the issue of paying for it should not prevent them from receiving care. That can follow. In Nigeria the reverse is true: profit drives the provision of health care.

PAXHERBALS AND A LONG MONASTIC TRADITION

 **Brother Peter Eghwudjakpor OSB,**
Head of St Benedict Monastery, Ewu

Paxherbals follows in a monastic tradition that seeks healing for wholeness in the truest sense of the word.

From the earliest times, in the East and West, monks have been associated with the tradition of healing. The reason for this is obvious. The monk is one who searches for healing and wholeness, first for himself before anything else. Conversion and enlightenment are an integral part of a life that calls on the individual to transcend himself, especially his egotistic self, in order to experience wholeness of being. His calling enhances the monk's quest for completeness, order, peace, health and general well-being.

The monk is interested in the rediscovery of life for all his neighbours – not only human but also plants, animals and the entire ecological system.

All these are sacred; all are connected and interdependent.

The Benedictine motto *pax* – “peace” in Latin – which was affixed to “herbals” by the monks of Ewu made the Paxherbals name very rich in meaning. It also reveals the unique tradition from which the enterprise grew: a tradition of peace that champions non-violence while co-existing with a violent world; a tradition of order that does not destroy chaos; a tradition of wholeness that does not fight fragmentation.

From its home in Ewu, Paxherbals approaches health and healing in a holistic way through natural remedies. The concern is for total well-being – the true *pax*. It is about healing in the truest sense of the word: healing that does not approach sickness as an enemy; that treats herbs and all nature with respect; and that treats the human person with dignity and reverence.

¹Juju is a term widely used in Nigeria to denote witchcraft or fetishism.

3: “MADE IN EWU”: A HERBAL ENTERPRISE BASED ON SCIENCE

Professor Joseph Okogun, Head of Scientific Research and Development at Paxherbals and Consultant Professor of Phytochemistry and Organic Chemistry at the National Institute for Pharmaceutical Research and Development (NIPRD)

Underpinning the day-to-day operations of the Paxherbals factory is the work of our science laboratory team. They provide the pre-mixed essence for production and carry out rigorous research to ensure that our merchandise is of the highest quality.

I believe herbal products have certain advantages. Orthodox drugs encounter resistance and are constantly evolving as a result. Multiple drugs are often used to tackle diseases, whereas some herbal products have multiple active components within them. One herbal product can sometimes be used for the same purpose as a combination of orthodox drugs. The lower toxicity of herbal products also reduces the likelihood of side effects. As a chemist by training, I want to prove these claims through science. I am approaching it as a frustrated scientist working in reverse. I know what works in orthodox medicines: what I need to find are the original natural ingredients in their most effective form. Science can help define the active component, dosage and potency within herbal ingredients.

At Paxherbals we have three laboratories, each with a different focus: quality control, microbiology and research. Our aim is always to meet universal

standards of scientific rigour. We are keen to prove that plants work because of the chemicals they contain, rather than any spiritual powers. We operate according to WHO standards, and undertake and publish research in partnership with universities in Nigeria. Our links with academic institutions have allowed us to be part of the federal government’s Industrial Training (IT) scheme, which provides internships for science undergraduates to gain practical experience. We take as many as 30 at a time from three universities, for six months. It is important that the scientists of tomorrow are willing to continue to investigate the scientific and health-giving properties of herbs.

Recent research into measuring the decline in potency of active ingredients has informed more precise product expiry dates. Another key area of experimentation is geared to ensuring that our products are compatible with orthodox drugs. Many Nigerians take the two in tandem. It is important to devote time to testing this to ensure that there are no adverse impacts caused by mixing products. To date, we have not discovered any negative side effects caused by combining Paxherbals products and orthodox drugs when this is done under the supervision of our health care providers.

Quality control is undertaken to ensure that products do no harm, contain no impurities and that doses are standardised. The water in the products is tested in the microbiology laboratory and, if necessary, purified to ensure that it is free from impurities. Each and every consignment of drugs is tested in this way.

Thirty-two of our products are registered with the National Agency for Food and Drug Administration and Control (NAFDAC). This is the largest number

PAXHERBALS PRODUCTS – DETAILS

PRODUCT	USE	INGREDIENTS	DOSAGE
Paxherbal Nomaplus	Management and treatment of inflammations	Zingiber officinale, Tridax procumbens, Allium sativum	60ml twice daily
Paxherbal Black Powder	Food poisoning, gastritis and indigestion	Mangnifera indica, Pittosporum viridiflorum, Viscum album, Terminalia catappa	One teaspoonful in 200ml water Twice daily
Paxherbal Malsol	Malarial fever	Alstonia boonei (50%), Azadirachta indica (30%), Viscum album (20%)	60ml three times daily
Paxherbal Bitters	Promotes blood circulation; prevents kidney stones; helps with digestion; activates bile flow; increases immunity of the body against bacterial and fungal infections. Helps in the prevention of diabetes and accelerates bodily repair; heals wounds and alleviates toothache	Glycosides, Lycopenes, Aliphatic phenols, Glycoflavones, Carotenoids, Saponins, Tannins, Quinine and Alkaloids	Two tablespoons in 150ml (half glass) of water Children: one tablespoon into 75ml water Stir and drink twice daily.
Paxherbal Diartea	Management of symptoms of diabetes, high cholesterol and hypertension	Tridax procumbens (20%), Mangnifera indica (20%), Zingiber officinale (25%), Viscum album (35%)	300ml boiling water to two tea bags and allow to infuse Twice daily

of any Nigerian herbal medicine company. Our NAFDAC approved products have been certified for doing no harm, not for efficacy. Re-registration for a product is required every two years and costs ₦70,000 (about US\$350). We believe that this approval is important to demonstrate our commitment to a professional, scientific approach. Charlatans and counterfeiters do not bother with NAFDAC registration.

We would welcome formal efficacy trials for our products. However, in Nigeria clinical trials can only go ahead with government approval and support – and they are expensive. We are working towards trials being held, and although no agreement has been reached we continually gather quantitative and qualitative data about the products that will inform this process.

Anna Aikpokhio, Information Unit at Paxherbals

The current Paxherbals facility in Ewu was opened in 2000. It has been continually modernised and expanded, and combines a clinic for patients, a research and development laboratory, and production. Paxherbals also has medical centres in Jos, in Plateau State, and Lagos; a third one will open in Owerri, Imo State. We have come a long way since 1996, when drugs were made in large jerry cans and consultations took place in a small wooden hut.

Paxherbals employs 125 staff in the Ewu facility and seven in Lagos. It is the largest private rural manufacturing business in Edo State. More than 90% of our staff in Ewu come from the immediate community. The provision of staff welfare helps with retention. Our employment payment model is also unique. Staff are given a basic salary calculated

"COMMUNITALISM" IN THEORY AND PRACTICE

Father Anselm Adodo OSB

"Communitalism", a theory that I developed in my doctoral dissertation, draws heavily on the "integral worlds" research model of the Geneva-based TRANS4M Center for Integral Development. I would describe it as humanistic capitalism. Although many of us buy and use products from China, capitalism does not ask us to think about the condition of the workers who make these items. Those committed to communitalism would enquire about these people, not just the products. They want to know who assembles the products and whether they are being treated fairly. They ask: does buying this product improve the lives of those who produce it? Or does it only serve to enrich company executives?

Communitalism is a global concept. We must not only think about justice for workers in Ewu, but also for those who work for other companies and in other countries. Communitalism requires capitalism to do more: to have a conscience, to care for the environment and for local communities.

Paxherbals is more than just a health institution. It is a business that seeks to apply the principles of communitalism to its daily operations. We work to make a profit, but we are also mindful that we exist within a community. What we do, and the products we make, should also benefit

local people and our staff. In the factory we have Muslims and Christians working together. This is a potent symbol in a country often depicted, erroneously, to be divided between a Muslim north and a Christian south.

In Nigeria, employee care is generally very poor. Companies do not sufficiently consider the welfare of their workers. Each of our departments has a staff welfare team member and we consider all staff to be equally important. The welfare member represents colleagues at a monthly meeting with the factory supervisors to discuss workers' needs, challenges and levels of happiness. Staff contentment and involvement are fundamental.

Staff members are entitled to paid sick leave – a rare phenomenon in Nigeria. We cover all the costs associated with treating illness. People are free to choose either herbal or orthodox care. Efforts to support staff welfare have been crucial in creating a positive and harmonious working environment at Paxherbals.

We ask for certain things in return: punctuality, commitment and respect for others. This is clearly spelled out in the code of conduct all employees are asked to sign. For example, Article 1 states that there is no such thing as African time in Pax. Fines are levied for infractions of the code. The concept of equal rights and obligations is an integral part of our work culture.

in relation to their educational qualifications, regardless of their role; but manual labourers earn as much as school certificate staff because of the onerous physical demands of their work. Salaries can be topped up through a bonus scheme.

Production is done manually. Each product is given a batch number, manufacturing number, expiry date and unique NAFDAC approval code. A quality control officer randomly tests finished products to ensure they meet the standards required.

A major challenge, one that is common to all businesses in Nigeria, is the intermittent electricity supply. We need light and air-conditioning; we need power for drying herbs, for the tea-bagging machines, coding machines and conveyor belts. Even when there is power from the grid, the voltage is often insufficient to run the factory at its full capacity. The factory is therefore substantially reliant on generators, but these can also develop problems even though they are well maintained.

We design and build machinery for the factory ourselves – for example, for leaf-drying. We think that our home-manufactured machines are better than imported ones. For one thing, they are a lot cheaper. In most cases, they can also be repaired more quickly and do not require spare parts that can only be ordered from overseas. We are proud of the machinery we have built and labelled “Made in Ewu”.

4: BRINGING HEALTH CARE CLOSER TO THE PEOPLE

 **Father Anselm Adodo OSB**

Our products deliver affordable health care. The drugs have been designed to combat common ailments affecting Nigerians: communicable diseases, such as tuberculosis and typhoid, as well as non-communicable conditions like cancer and hypertension. I would estimate that 70% of Nigerians who take orthodox drugs also take herbal products, often at the same time. Paxherbals’ products are cheap compared with imported ones, readily available and made from indigenous resources. These are all important factors in bringing health care closer to the people. But the care must also understand and respect local culture.

Indigenous health care is preventative as much as it is curative. It has a broader understanding of well-being. At Paxherbals we believe that effective treatment requires you first to know the family

background of the patient and their day-to-day environment. When they come into the clinic, patients are asked about what they do, how many children they have, who they live with and what they believe in. This differs from the orthodox approach to medical treatment which focuses solely on identifying symptoms and delivering diagnoses.

It is vital that we step beyond only considering biological health and cure in Africa. Individual well-being and prevention are just as important, if not more so. For example, the individual who, after leaving their place of work, goes home and drinks too much alcohol does not need more medicine; preventing them from feeling the need to drink excessively is what is needed. This is what we mean by holistic health care.

 **Brother Anthony Olajide OSB,**
Consultant at Paxherbals Clinics

The Paxherbals holistic approach is visible in our clinics in Lagos, Jos and Ewu, which each see up to 20 patients a day. The waiting rooms are designed to minimise the stress of patients by creating a relaxed environment with fish tanks, artwork and music.

The consultation process is done through mixed analysis. First of all the patient’s vital indicators – weight, height, temperature and blood pressure – are checked. Then I discuss their concerns with them, at length and in a broad and open way. To an extent, patients are diagnosing themselves; often they just need to talk to someone for their problems to become apparent.

I was trained how to consult by colleagues, but it is actually quite straightforward. I listen, I understand the problem and I use herbal products to tackle the condition. Sometimes there is no need to prescribe a product. In Ewu, an alternative treatment room provides patients with the chance to exercise or play music on indigenous instruments.

The orthodox approach to diagnosis can make it hard to identify the root of the problem; listening to concerns and troubles is highly informative and allows prescription of the most effective treatment. Having this type of relationship with a patient can be very demanding. When I visit Lagos I get constant calls from patients wanting to see and talk with me. They regard care as being more than just diagnosis and drug issuance.

 **Dr Francis Achebe GP, Medical Director St Margaret Medical Services Ltd, Okene, Kogi State**

Several years ago I began to notice problems with orthodox medication. Some drugs were too expensive for patients; others were discontinued without much notice for failing to meet NAFDAC standards. So I started looking for alternatives. The first thing I did when I heard about Paxherbals was to visit them. Herbal medicine was not part of my training. If I was going to recommend the use of herbal products, I had to be sure that I was not being irresponsible towards my patients.

I began by using a Paxherbals product for chronic conditions, when patients wanted to try something new and less expensive than orthodox drugs. What I noticed, gradually, was that they were looking well. Not cured, but healthier. Their wellness also improved the general family environment. There was less fear and stress about not taking care of family members while they recovered. All this convinced me to start using other products.

One of these products is Pax White Powder. It is made of snail shell which contains natural calcium. I began using it for teething problems among children. If a child does not receive enough calcium, bile will build up, irritating the stomach and causing dehydration. Orthodox drugs prescribed to treat this condition contain paracetamol but no calcium; hence the calcium deficiency, the root cause of the problem for both mother and child, is not resolved. In giving patients Pax White Powder I have observed that calcium levels improve and the problem is tackled at source. In rural Nigeria calcium deficiency is a common condition and one that is often mistreated. Yet a traditional natural product could make a huge difference to people's lives.

Herbal products can be used to treat some conditions in a much more culturally sensitive way than orthodox drugs. In Africa, we prefer to see friends and relatives even when they are sick; we do not want them hidden away. I feel reluctant to refer patients to national cancer centres. Many do not survive. In my opinion, orthodox methods of tackling cancer often accelerate death. Chemotherapy is also extremely expensive, invasive and often debilitating. Herbal treatment is natural and, though slow, it sometimes helps to stem the spread of the cancer and on very rare occasions reverses it. However, even when the patient does die the shock is less for the family if they have remained at home all along.

With stubbornly high levels of poverty in Nigeria, and rising numbers of cancer cases, we need to

find alternative ways of treating our population. In my experience, herbal remedies can help provide better palliative care. There is limited proof about their ability to cure, but I would certainly encourage more research into efficacy.

 **Josephine Owumi Elohor, patient**

In March 2013 I was diagnosed with breast cancer in the United Kingdom and I went for treatment in the USA. The tumour had spread so far that the doctors were pessimistic. I was told that my cancer was terminal and that I had six months to live. At that point, I remembered that friends had told me about Paxherbals and, although I was sceptical, I was willing to try anything to fight the cancer.

I visited Ewu and was prescribed a combination of herbal drugs and natural products that Paxherbals has identified as being helpful for cancer patients. I am now mixing herbal and orthodox treatments, and it is having an impact. The tumour is not growing. It might not be going away, but the last time I went for treatment in USA the nurse was surprised. She thought the test results that came back were from three months earlier, but they were not. The tests showed no growth of the cancer. After 18 months, I still feel quite well. I do not feel sick and although the lumps on my breast are still there, they are not getting bigger.

The herbal treatment is not just effective; it is also very readily affordable for a mid-level government employee like me. When I travel to the USA for treatment friends and family provide financial support for me, but when I go to Paxherbals I can afford the medicines on my own. My reluctance to use herbal products has gone now. In fact, I have brought five other people with breast cancer issues to Paxherbals because I believe they can help them.

5: CREATING OPPORTUNITY IN THE COMMUNITY

 **Father Anselm Adodo OSB**

Paxherbals has created many jobs for the local community at different skill levels. Beyond Ewu, 1,000 distributors sell our products all across Nigeria. Many earn a living solely by selling our merchandise. In 2014 our best-selling product, Paxherbals Bitters, sold more than 100,000 units. As it continues to expand, Paxherbals will create more new jobs and opportunities in the Nigerian herbal health care sector.

To expand production we will require greater access to ingredients. Currently, our raw material suppliers practise ad-hoc collection rather than formal cultivation, employing a few individuals to help them. Prices are fixed by kilogram and agreed in advance. Our plan is to grow herbs on communal farms around Ewu in future. To cultivate herbs and grasses is the only way to keep up with demand, but this must be done sustainably.

Training is offered to raw material suppliers to ensure that plants are harvested sustainably. Paxherbals training also extends to business development, administration and financial management. Access to credit is one of the major challenges that young people face when they want to start or expand a business. On occasion, suppliers ask for financial help to expand their operation. We regard our suppliers as our partners, so we try to support them whenever possible.

An existing raw material supplier can be given

credit for 30% of an agreed yield. When the products are supplied the money owed is deducted from the payment. The credit is not a loan or a grant in our eyes. It is simply a deposit on what they are going to supply. It is a fair, workable solution to allow farmers to improve their income.

I see an increasing number of young people interested in agriculture. I think this is very positive and that agriculture can help develop rural communities in Nigeria. But I also want to demonstrate that it is so: to make the claim explicit and evidence-based. I do not suppose that just going to the field and planting something is going to bring economic development; but when you have an association of growers who come together as a group and plant 1,000 hectares of crops which are in turn linked to a processing factory – this type of agribusiness can, I believe, help to create greater prosperity while also being sustainable.

The desire to generate not just jobs, but business

TRADITIONAL MEDICINE – A GLOBAL INDUSTRY

“Herbal medicine is a US\$100 billion (₦16.8 trillion) industry and our hope is to stimulate the interest both of industrialists and the general public to the enormous potential this sector holds. It is something worth exploring that could add positively to Nigeria’s Gross Domestic Product (GDP) and that could be some sort of income for the whole country.”

Maurice Iwu, Professor of Pharmacognosy and Chairman, Bio-Resources Development Group¹

The rapid growth of the global herbal remedies market is driven by an aging population and increasing consumer awareness. China and India are the two leading producers, consumers and exporters of herbal products. In 2011, emerging markets recorded double-digit growth in the sector.

In spite of their taxonomic and ecological diversity, few herbal products are produced in commercial quantities in Africa for domestic or international consumption. Markets tend to be very localised. For manufactured medicines, both orthodox and traditional, Africa is substantially reliant on external producers. A report by the Chinese Chamber of Commerce for the Import and Export of Medicine and Health Products showed that trade in health products with Africa increased 10-fold in the 2000s, reaching US\$1.84 billion by 2011.²

The fact that 70% of the essential medicines consumed in Africa are imported is important for two reasons. Over-reliance on imports makes the continent vulnerable to disruption of supply and price fluctuations; and a booming import trade exists because of the dearth of professional domestic producers. Chinese herbal products are prominent in African markets, in Nigeria and elsewhere.

Myles Mander, of the Institute of Natural Resources in South Africa, states that “the development of a modern industry based on medicinal plants will come when African products are made for African consumers. Currently, traders in medicinal plants are not involved in the development of the industry and are not so well organised, so have little influence with their governments. The result is reduced supply and increased costs, with little product development and poor quality products.”³

As Paxherbals is showing, this situation can be changed. If properly nurtured, an African herbal pharmaceutical industry could emerge to supply both domestic and export markets.

¹ M. Iwu quoted in F. Salami, “Turning Herbal Medicine into Wealth”, Real News Magazine, 15 December 2014.

² G. Okore, “What the Doctor Ordered”, China Africa Magazine, 5 August 2013.

³ B. Stanley, “Recognition and respect for African traditional medicine”, <http://www.idrc.ca>

opportunities for the community is a very important part of our philosophy. For example, the bottles used for packaging our products are all manufactured in Nigeria. My preference is always for a local supplier over a more distant one. Even if the costs are greater, this ensures that wealth is retained and circulates within the community.

 **Hon. David Iyoha, former Speaker of Edo State House of Assembly**

I first met Father Anselm Adodo in early 2012. At that time Paxherbals went to Benin City, the capital of Edo State and a two-hour drive away, to purchase the plastic bottles for its drugs. With my strong commitment to developing the community I live in, I decided to build a bottling plant in Ewu. The plant opened on 12 December 2012.

I have one production unit, which supplies 6,000 bottles a week to Paxherbals, and I employ five staff. But Paxherbals requires a minimum of 12,000 bottles a week. Moreover, I currently produce only one type of bottle, but there are other types which Paxherbals uses. I want to expand to the extent that Paxherbals will not have to go to Benin City, or beyond, for bottles. To do this I will need to establish three or four production units. That will benefit the customer, by cutting transportation costs, and it will provide more jobs in the community.

Unemployment is a scourge in Ewu, as it is in much of rural Nigeria. As a former representative of the people, I want to support Paxherbals because I believe its business model is a good one for creating jobs and wealth in the community.

6: CHALLENGING PERCEPTIONS, BUILDING TRUST

 **Father Anselm Adodo OSB**

At the start of the Paxherbals venture it was difficult to convince others of its merits. I needed the support of the monastic community because without their blessing it would never have worked. It took time and patience to convince them. Now I want to keep changing perceptions among Nigerians at large.

I have authored and published books, such as *Nature Power*, with the aim of demystifying herbal medicine: to show how it can be explicit, rational and science-oriented. I also have two national newspaper columns – in *The New Telegraph* and *The Sun* – that focus on the merits of, and need for,

herbal treatment as a health care option. Media, in all forms, has a critical role to play in challenging and forming opinions. Building the trust of the consumer is so important. That is also why all the ingredients in our products are shown on the packaging. The customer is assured of quality and transparency at every level.

Social media will provide a useful platform for engaging a younger audience on the merits of herbs and indigenous knowledge. The engagement of young men and women; the future generation of Nigerians is crucial. I have found that the youth like the concept of something indigenous, uniquely Nigeria, yet modern. Paxherbals fits that ideology and is really the only herbal enterprise of its kind in the country.

Perceptions of herbal medicine have changed significantly amongst orthodox practitioners in Nigeria. Ten years ago medical doctors did not want to identify with herbal products or talk about indigenous medicine. I like to think that Paxherbals has played a part in shifting attitudes. Doctors have been impressed by how rigorously we apply scientific principles and appreciate our openness and willingness to learn about patients' experiences of taking our products. In demonstrating how herbal products can be professionalised, and in making clear our willingness to test the efficacy of products in scientific trials that go beyond anecdotal evidence, perceptions are shifting. But clinical trials have to be done in partnership with government in Nigeria and so far this has not proved possible. We shall continue pressing.

 **Dr Francis Achebe GP, Medical Director
St Margaret Medical Services Ltd,
Okene, Kogi State**

Initially some of my patients were reluctant to turn to herbal medicine. To address their fears I offered patients more frequent check-ups in order to monitor their progress better. Patients were also worried that there would be an insufficient supply of a drug, something they had often experienced with orthodox medicines. I have never yet found Paxherbals products to be unavailable. The constant availability of a product builds trust among patients.

Orthodox medical practitioners are starting to change their views of herbal health care. I am a doctor myself, but when I fall sick I am also a patient. I have tried some of these products and have seen the impact they have on my patients. I like the fact that Paxherbals is willing to put its drugs

up for study and invites orthodox practitioners to share our knowledge with traditional healers and learn from them in turn, at workshops and conferences. This is an important exchange.

Paxherbals wants to conduct complementary studies with orthodox doctors in order to learn about any side effects patients experience when taking their products and to determine how efficacious the medicines are. Learning goes both ways. If the product is not working as expected, they want to know if we can change the dosage or mix it with orthodox drugs and whether this helps. Paxherbals is always striving to improve what it has and is willing to share openly its findings. This will help to change perceptions among both doctors and patients.

7: ADVANCING AND PROTECTING AFRICAN MEDICINE

 **Father Anselm Adodo OSB**

Paxherbals is trying to set an example of how indigenous knowledge and science can work together for the benefit of everyone. Without the application of science, herbal medicine would just remain traditional; this is why our research and development laboratories are so integral to our

operation. Traditional medicine needs to evolve and modernise, and dispel superstitious beliefs that unless you prepare a remedy in a certain pot, for example, it will not work. Science will not weaken traditional medicine.

What science has failed to take proper account of is the social environment of a disease or condition and its appropriate treatment. The properties of a papaya leaf, for example, should not only be tested in a laboratory; you need to understand how a community thinks about and uses it. This approach should be an integral part of the scientific research. It provides a line of enquiry for the scientist to explore. Without this investigation he or she will not have tested the properties of the papaya leaf fully. The scientific approach we use at Paxherbals is founded on knowledge that is already there. In simple terms, science is the confirmation of a claim or a proposed theory. So why not test herbal products using this mindset?

African medicine can make a huge contribution to the world in tackling diseases like cancer. Instead of traditional knowledge being lost by the library load, it should be preserved and collected to allow new knowledge to be built on past learning. Modernising traditional knowledge to transform community development is critical for Nigeria. Protecting this knowledge is also essential.

HERBAL MEDICINE EDUCATION IN NIGERIA

 **Professor Tony Elujoba,
Professor of Pharmacognosy
at Obafemi Awolowo University**

A national committee, set up by Federal Minister for Health, Professor Onyebuchi Chukwu, was tasked with formalising the study of herbal medicine through the development of a national BSc. (Herbal Medicine) curriculum for Nigerian medical schools. A syllabus has now been agreed by recognised experts and it is in the process of being accredited by the relevant boards before it can be taught. Six universities with existing medical, pharmacy and nursing schools have been recommended to pilot or model the teaching process. Despite delays, I remain confident it will move ahead.

In 2014, discussions were held in Lomé, Togo, under the auspices of the West African Health Organisation on the official incorporation of a few traditional medicine modules into the

conventional medical, pharmacy and nursing schools of West African states. The meeting brought together medical and pharmaceutical academics and other experts from throughout the Economic Community of West African States (ECOWAS). Having a BSc. (Herbal Medicine) programme that co-exists with conventional medical training would be a step in the right direction and a vital tool for changing the attitudes of medical professionals and members of the public towards herbal medicine.

In general, governments across the continent need to invest in research and development to ensure minimum standards for herbal products to ensure acceptable safety, efficacy and quality. The government should build herbal teaching hospitals for clinical training to support the curriculum being developed. This would give students the opportunity to practice what they learn in the classroom about diagnosis, pharmacology, physiology and herbal therapeutics as well as to understand the philosophy that drives this type of holistic care in a practical setting.

In 1996, when I founded Paxherbals, healers were unwilling to share their knowledge with outsiders. They feared losing the asset that provided their only source of income and regarded me as a threat to their livelihoods. Over time, attitudes have changed. That is the power of dialogue. Establishing trust means that partnerships are now possible.

Tradition dictates that a healer will pass on his knowledge to the first-born son. But many sons are not interested in following in their father's footsteps these days. The hereditary transfer of knowledge does not offer the promise of a quick return. There are also healers who do not trust their sons to use the knowledge correctly. If it is brought to us by the healer instead, we try to ensure that some compensation reaches the

family but this presents us with a dilemma. Do we set up a foundation in memory of the healer so that his name will not be forgotten or pay royalties to the son who was not interested in retaining the knowledge?

Protecting the intellectual property of traditional healers remains a challenge in Nigeria. It could be overcome if the authorities were to recognise in law the value of the knowledge. Much of value has already been lost as a result of the lack of a supportive legal environment. Often, when a healer dies their knowledge dies with them. When I think of the healers I have known who have died without passing on what they knew, I feel very sad. Preservation of this knowledge is my passion. Each death is like the closure of a whole library.

A MODEL FOR INTEGRATED HEALTH CARE IN GHANA

 **Dr Peter Arhin, Director of Traditional and Alternative Medicine at the Ministry of Health, Ghana**

The Department of Traditional and Alternative Medicine within the Ghanaian Ministry of Health aims to ensure effective development and integration of traditional and alternative medicine as a distinct medical practice system within the National Health Care System.

In 2001, the Kwame Nkrumah University of Science and Technology in Kumasi, Ghana, started work on testing herbal remedies for common ailments and training people in integrated health care. The first cohort of students graduated in 2005. The aim was to educate orthodox doctors about herbal medicine, using science. This is a continuous process. The idea is to support a system that can diagnose in line with western medicine, but provide treatment with either herbal or orthodox drugs.

Fifteen hospitals, from all 10 regions of Ghana have introduced the integrated service. In practice, this means that within each facility a unit has been created that focuses only on herbal care. For a patient attending the hospital, diagnosis is followed by a treatment choice: orthodox or herbal. In health care, I believe there should be alternatives for people to choose the treatment they get. The initiative has targeted 20 common diseases, communicable and non-communicable. We have seen in Ghana that the complementary addition of these herbs

to western medicine – for conditions such as diabetes – provides optimum treatment.

Initially, 20 small manufacturers, and 86 herbal medicines were approved by the Food and Drugs Authority Ghana but maintaining a constant supply of herbal drugs is a challenge. Re-registration of products is regularly required and some suppliers have been unable to comply. Ideally products should not be in liquid dose form but in capsules, making them more stable and easier to regulate. Again, a lack of supplier capacity has prevented this standard from being achieved.

Integrating herbal products into the National Health Insurance Scheme¹ remains a challenge. Up to 80% of Ghanaians are subscribed to the scheme which provides them with free access to drugs, often imported into the country at great cost. Until an agreement is reached on standardised pricing and verification coding, herbal medicine will not be formally integrated into this insurance scheme. However, I remain confident that we can reach a standard where all parties will be satisfied.

The next step, clinical trials within hospitals, is needed to prove their efficacy on a global stage. This will attract pharmaceutical investment. If drug imports can be replaced with equally efficacious domestic products then we will have more money to spend on tackling and improving other health care issues in Ghana.

¹ The National Health Insurance Scheme was established by the government in 2003 with the aim of providing equitable access and financial coverage for basic health care services.

The knowledge that we have managed to preserve at Paxherbals can, and must, be used in a more explicit way. I have been given many recipe books by healers. Our aim is to see how we can get them online so that the knowledge will be readily available to more people and to future generations. This is something we need to take seriously. This expertise is very valuable. Preservation must extend to creating an evidence base, because in Nigerian universities there is very little material on herbs and flora and their properties.

 **Dr Eric Ayemere Okojie, Paxherbals attorney and expert on traditional medicine and the law**

The law on traditional medicine is still developing in Nigeria. For example, the question of who is a practitioner and who is a quack is not clearly defined in law. The government has not yet taken a bold step to codify the intellectual property rights of native healers. So far it has been up to others to encourage healers to come together to protect their rights. It has not regarded the herbal medicine industry as important enough to make this a priority. By contrast, in Nigeria's music industry there is noticeable enforcement of laws and a willingness on the part of the government to act on intellectual property disputes.

The lack of a central, national regulatory body is a problem. Healers also operate within a very local setting. State traditional medicine boards have some powers to regulate the conduct of traditional healers – in Lagos State they have to take an oath – but even at this level the gap between the law and healers remains wide. In many states, boards are established only in name.

As a first step, native healers should try to register their clinic with the federal Corporate Affairs Commission. This is a start towards protecting their intellectual property. In theory, the law is strong enough to protect the rights of a traditional healer's recipes. However, its potency will only be known when it is tested.

Nigeria needs to adopt something similar to Ghana's Traditional Medicine Practice Act of 2000. Alternatively, it could follow Namibia in establishing a Traditional Medical Practitioners Board accompanied by a Traditional Healers Health Bill, which combine to oversee the registration and regulation of traditional healers. The board creates a focal point where healers can express their concerns and grievances.

The 2007 Traditional Medicine Policy for Nigeria provides for a Council for Traditional Medicine, but

the policy has not yet been signed into law. It is from this legal basis that the enforcement of intellectual property rights in herbal medicine could emerge throughout the country. Unfortunately, that is likely to be a slow and erratic process.

8: INSTITUTIONAL PERSPECTIVES

 **Dr Bunmi Omoseyindemi, Chairman of Lagos State Traditional Medicine Board**

The Lagos State Traditional Medicine Board was created by law in 1980 following the Alma Ata Declaration on primary health care two years earlier (see text box on page 5). Among other things, it was empowered to compile and maintain a register of all traditional medicine practitioners in the state; to regulate and the conduct of traditional medicine in Nigeria's commercial capital; and to establish traditional clinics, health centres and hospitals. There is supposed to be a board in every Nigerian state, but some have yet to establish one, while in others they have little to no impact.

In Lagos State, our goal is to improve the working standards of traditional healers through education and training. Human resources for health – doctors and nurses – are in such short supply. We need to become innovative and train traditional practitioners to make up the shortfall. Integration of traditional and orthodox medical practice is the future for the national health system in Nigeria.

So far the political will to support the development of herbal medicine has been lacking, but I believe this will change when people realise that the sector is profitable. For now, they do not see it. I believe Nigeria must find ideas for growth from within. This is how China has managed to develop so quickly.

Health care is a business in Nigeria and it is a sector that has the potential to create jobs for Nigerians. It can also create a local economy around production. Looking ahead, the government of Nigeria should provide incentives and subsidise locally produced herbal products that meet basic standards. This will make them affordable for the poorest in society and will encourage investment in this sector.

 **T.F. Okujagu, Director General of the Nigeria Natural Medicine Development Agency (NNMDA)**

The NNMDA was established in 1997 by a Federal Ministry of Science and Technology order in

NIGERIA'S TRADITIONAL MEDICINE POLICY

The Traditional Medicine Policy for Nigeria was agreed in 2007, but has not yet been enacted. Professor Tony Elujoba of Obafemi Awolowo University believes that if the policy becomes law, it will provide the “backbone for the effective establishment of official recognition of traditional medical practice in the country”.¹

Developed as part of the African Union-sponsored “Decade of African Traditional Medicine” in 2001–10, Nigeria’s policy has three key objectives:

- Develop and facilitate the use of traditional medicine in the official health care system.
- Harness the potential and economic benefits of traditional medicine practice, in support of the goals of the National Economic Empowerment and Development Strategy.
- Establish a country-specific institutional framework for traditional medicine.

The policy acknowledges the important economic impacts that herbal and traditional medicine can generate; the need to offer better intellectual property rights protection to those who possess the indigenous knowledge; and the need for a traditional medicine practitioners’

council to facilitate the protection of intellectual property. If established, this council would provide a single focal point for addressing this important issue; at present, there is no clear way that native healers can interact with the government to protect their property rights

The policy also subtly, though implicitly, recognises that integration of traditional health care and the mainstream health system should provide for a degree of separation to ensure that the holistic elements of traditional care are not lost. It proposes a similar approach to that of Ghana, where orthodox practitioners are educated to have an understanding of how traditional healers practise medicine and are therefore in a better position to decide whether a herbal or more orthodox remedy is more appropriate. A draft strategic plan for Nigeria was written in 2013 by experts appointed by the federal government to guide the implementation of the project, but it remains unpublished.

Slow progress is being made. On 9 December 2014, President Goodluck Jonathan signed into law the National Health Bill, which recognises everyone involved in the provision of health care services including traditional health care providers. This step may finally provide the framework for the Traditional Medicine Policy to be implemented.

¹ ARI interview with Professor T. Elujoba, 6 March 2015.


accordance with the National Science and Technology Act of 1980. Its mission is to promote traditional medicine through research. To do this it has established a number of initiatives including a digital library, a laboratory and a pilot production unit. These are all intended to provide information and technical support to practitioners so that they can improve their products and practices and meet regulatory requirements.

One of the biggest challenges is the view of herbal medicine as “traditional”, in the sense of being backward and practised exclusively by old men. But perceptions are gradually shifting. In attempting to use science to authenticate what herbal products claim to do, we are affirming the role that research can play in altering perceptions.

In the past six years the NNMDA has delivered training to over 12,000 herbal practitioners. The remit has expanded beyond training to include natural product development. Improvements in

preparation, to meet certain standards, will enable these healers to create businesses and we support them through training in basic business skills.

HerbFEST, a now annual event that began in 2003, is one way that we can work with the private sector to stimulate the natural product industry and bio-business in Nigeria and the Economic Community of West African States (ECOWAS). I believe that events like this can help new natural products to enter the marketplace, support the establishment of equitable partnerships and educate investors and the general public more widely on the natural products industry. In 2014, we had more than 100 small and medium-sized enterprises involved in the manufacture of herbal and natural products exhibiting in Lagos. We need to think seriously about what our bio-resources and bio-diversity can offer the world.

 **Dr Paul Orhii, Director General of the
National Agency for Food and Drug
Administration and Control (NAFDAC)**

NAFDAC, established in 1993 under the Ministry of Health, is responsible for regulating and controlling the manufacture, advertising, distribution, sale and use of food, drugs, cosmetics, medical devices, chemicals and packaged water in Nigeria. It also oversees imports and exports.

Finding African solutions to African problems is an important ideal for us. Ebola has shown that we cannot count on “Big Pharma” for everything. There is a need to design herbal drugs that target neglected tropical diseases which mainly affect Africa and are not profitable enough for the global pharmaceutical industry to invest in. NAFDAC is committed to working with herbal medicine producers to help deal with the issues that face the Nigerian population in health care.

9: CONCLUSION AND RECOMMENDATIONS

Paxherbals is committed to professionalising herbal medicine in Nigeria by combining indigenous knowledge with scientific research and modern production methods. Its objectives are implicitly endorsed by WHO, whose Traditional Medicine Strategy 2014–23 recommends “proactive policy” to ensure that traditional and complementary medicine are integrated into national health care systems. In Africa, 39 countries now have traditional medicine policies and 18 have adopted strategic plans for health care that incorporate traditional medicine.

In West Africa, **Ghana has taken the lead in embracing traditional medicine.** Fifteen orthodox hospitals, from all 10 regions of the country, have a unit which focuses specifically on herbal care. Increasing numbers of medical practitioners receive training in herbal medicine. The aim, as Dr Peter Arhin, Director of Traditional and Alternative Medicine at the Ghana’s Ministry of Health, states in this publication, is to create a health system that “can diagnose in line with western medicine, but provide treatment with either herbal or orthodox drugs”.

Africa’s disease burden is growing rapidly. To ignore the potential of traditional health care is to omit a part of the solution. Indigenous African medicine can bring affordable remedies within reach of millions who are unable to access orthodox care due to its cost or distance. It also provides an alternative for those who prefer, for many reasons, to be treated in a more culturally sympathetic and familiar way. While Paxherbals provides an example of what can be achieved from the bottom up by modernising product development and supply, **facilitation and regulation are the preserve of government.**

Nigeria could have a **thriving, home-grown traditional pharmaceutical industry** in the near future. The missing ingredient is the active support of the federal government, which sets policy, and Nigeria’s 36 states, which are responsible for regulation and technical backing for primary health care services. **The issue is less about funding than about political will and providing creative leadership to make room for traditional care; and about changing perceptions in a sometimes resistant mainstream health system.** This is not a pipe dream: again, Ghana has shown what is possible.

To signal an intention to be proactive and enlightened, and to provide the required framework, the federal government should:

- Sign in to law the Traditional Medicine Policy (2007).
- Expand the pilot project (see page 14) to formalise the study of herbal medicine in universities.
- Establish the Traditional Medicine Practitioners Council envisaged by the Traditional Medicine Policy (2007), to improve engagement with traditional healers and facilitate the protection of intellectual property.
- Sponsor randomised clinical efficacy trials for herbal products by the National Institute for Pharmaceutical Research and Development and extensive further research into new herbal products to address Nigeria’s disease profile.
- Create a specific department within the National Agency for Food and Drug Administration (NAFDAC) to oversee regulation of herbal products.
- Support the Nigerian Natural Medicine Development Agency (NNMDA) in training traditional healers and small- and medium-sized traditional remedy businesses to achieve required industry standards and register products with NAFDAC.

State traditional medicine boards have a vital role to play. While the federal government must provide the top down framework for the inclusion of traditional medicine in health care, and promotion of a professional, regulated traditional medicine sector, **successful implementation requires an engaged regional administration.** At present, few state boards are active. Regulatory oversight and the promotion of traditional medicine in regional hospitals are being neglected.

The importance of herbal medicine extends beyond its potential to contribute to better health care and health outcomes. As a successful local enterprise based on indigenous knowledge and community participation, Paxherbals provides useful insights for economic development in “peripheral” rural settlements throughout Nigeria.

10: POSTSCRIPT

 **Father Anselm Adodo OSB**

In 2016, to celebrate the 20th anniversary of Paxherbals, we will invite government officials to visit Ewu. We want to convince them that herbal medicine should be a part of the health care system in Nigeria. Of course, the government will want to take complete charge of the whole system. They will think that the best way to integrate orthodox and traditional health care is to place indigenous medicine under the umbrella of the mainstream, Western system. This would be the wrong approach.

Indigenous medicine is grounded in a different philosophy and culture, a different concept of the human being. Orthodox and traditional medicine can, and do, co-exist as independent partners. They should learn from each other. Paxherbals will strive for “collaboration” rather than “integration”.

The Nigerian government could learn a great deal from what is taking place in other African countries, but also from outside the continent. Government officials are forever travelling to China and India to study their health systems, which have balanced orthodox and indigenous health systems; but when they return home they do nothing to replicate what they have observed and learned. They need to start taking practical steps.

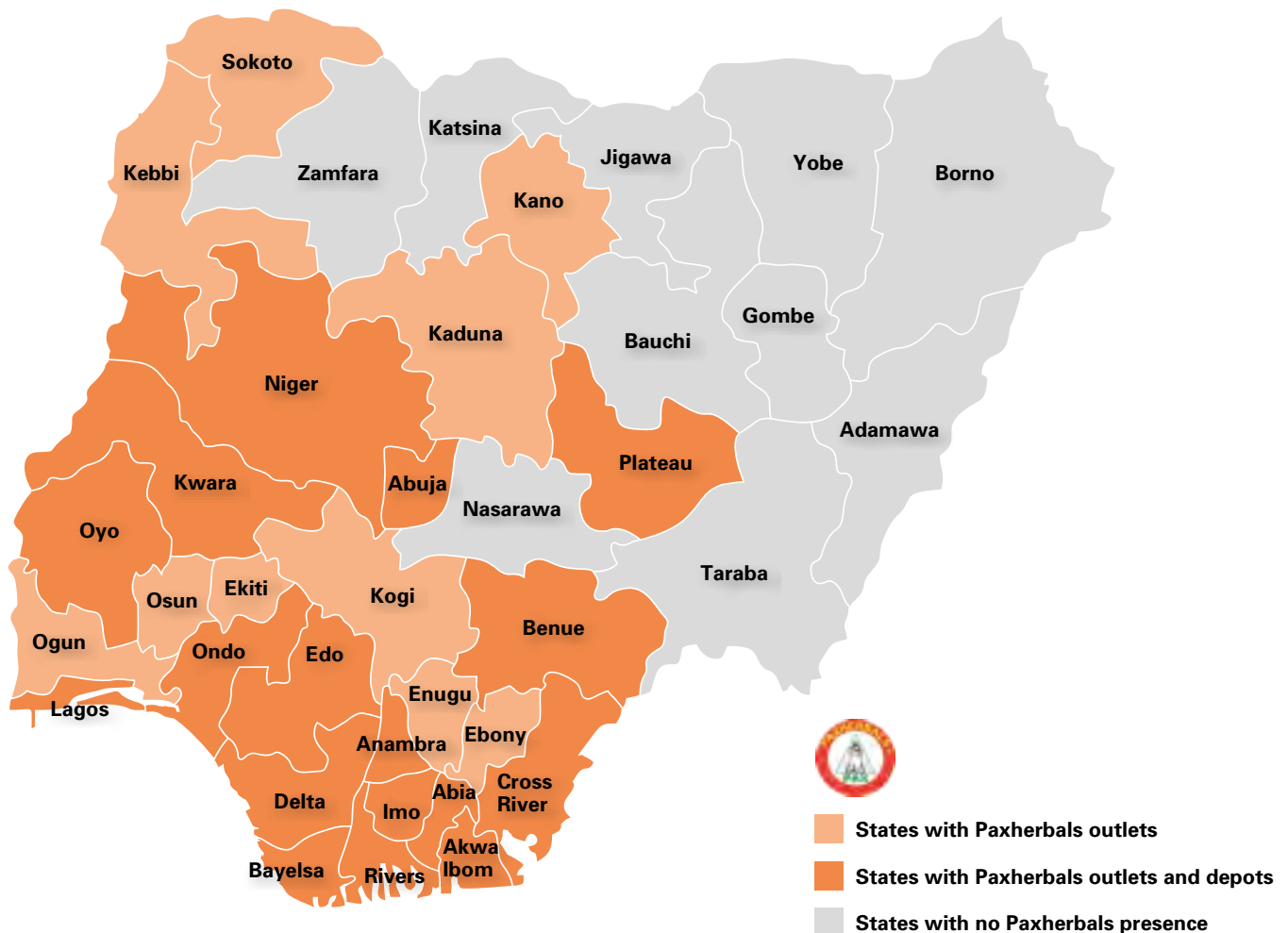
We also want to show government officials how a local enterprise, embedded within the community and based on indigenous knowledge, can flourish and deliver community-wide benefits. It has always been my belief that you must first demonstrate what is possible, if you want your model to be recognised as successful and emulated. That is what we have done at Paxherbals for two decades. It is a model that works. We need thousands more similar enterprises in rural Nigeria to provide job opportunities and hope for young Nigerians.

Paxherbals can run without me. We have proper structures in place. This is important. It is not good when the founder of a business wants to keep strict control of everything. When he or she is gone, the business often cannot continue. I can spend several months away from Ewu and everything carries on without anyone even noticing I am not around.

I am happy with the progress we have made, but never satisfied. I would like to see Paxherbals products available in every corner of the country – and exported. The cultivation of raw materials will need to be more systematic as the industry grows, providing scope for communal farming.

There should be herbal clinics within government teaching hospitals, and I dream of establishing a fully herbal teaching hospital in partnership with the government. Perceptions in some quarters of herbal medicine as a backward, non-scientific practice are starting to shift, but there is more to do before it is officially acknowledged as having the potential to fundamentally change health care in Nigeria for the better. There is always more to do.

MAP – PAXHERBALS DISTRIBUTION NETWORK IN NIGERIA



Products from Ewu are delivered to distribution depots throughout the country. A network of 1,000 distributors covers 26 of Nigeria's 36 states.

Paxherbals is careful about who it employs as a distributor. In order to be formally certified, a distributor must get 75% or above in an exam set by Pax. Those who pass are recorded centrally. They are also required visit the facility in Ewu, to learn more about the products and to understand the company's operations and philosophy. Certified distributors learn which medicines are used to treat which conditions and are provided with a reference booklet for assistance when engaging with patients.

MODERN AFRICAN REMEDIES

HERBAL MEDICINE AND COMMUNITY DEVELOPMENT IN NIGERIA

Despite its middle-income status, Nigeria's health system cannot provide even a rudimentary level of care for most citizens – particularly in rural areas. As the prevalence of chronic and infectious diseases increases, the potential of indigenous medical knowledge must be harnessed. In Nigeria, but also globally, there is growing recognition of the need to integrate traditional medicine into mainstream health systems to bolster their ability to cope with an ever-increasing burden.

In the early 1990s Father Anselm Adodo, a Benedictine monk, became increasingly aware of the tragic inter-generational loss of indigenous medical knowledge in his locality. In 1996, he founded Paxherbals at the monastery in Ewu, Edo State, to preserve this valuable resource and apply scientific rigour to the manufacture of natural remedies.

Two decades later, "Pax" is the largest private sector rural manufacturing enterprise in Edo State and an industry leader in Nigeria. It is regarded as an undoubted success story, one of which the monastic and local communities are justifiably proud. Success is based on joint endeavour. While Pax has created many jobs in its factory and laboratories, and economic opportunities through its local supply chain, its neighbours are suppliers of knowledge, skills and raw materials. They are also consumers. Pax is firmly rooted in, and has transformed, its surroundings.

This *Policy Voice* documents how Pax professionalised the production of traditional natural remedies and set about demonstrating that herbal medicines can be a force for innovation and progress in health care. An estimated two-thirds of Nigerians use these products, often in tandem with orthodox drugs. But Anselm is adamant that open dialogue, scrutiny and regulation are crucial if negative perceptions of non-orthodox treatments are to be dispelled and the economic potential of the sector realised. More than 30 Pax products are government-certified.

For Anselm, and Pax, "traditional" medicine must be modern, professional and based on science if it is to contribute to improving health systems and outcomes. With appropriate federal and state involvement, thriving traditional medicine and pharmaceutical industries could be fostered in Nigeria; and the transformation that Pax and the local community have brought about in Ewu could be typical, rather than exceptional. Indigenous knowledge, resources and enterprise remain under-exploited.

