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**INTEGRATION OF INNOVATIVE  
TECHNOLOGY  
IN HERBAL THERAPY IN  
KAKAMEGA COUNTY, KENYA**

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## Background

- Co-existence of a dual health care system is a global phenomenon.
- In Africa traditional medicine was regarded as magic for a long time.
- Kenya perceived herbal therapy as an unscientific, irrational and illegal practice.
- This negative perception and publicity hampered innovation in herbal therapy.
- Herbal therapy is prone to multiple challenges but has carved a niche in health care in Western Kenya.
- Technological innovations have remained rudimentary and a significant set-back.
- Technology can enhance healthy competition, quality control, and regulation.
- The *Moringa Oleifera* tree products from Tanzania depict this scenario.
- KEEP, a CBO operating in Kakamega forest, employs modern technology to produce *mondia whytei* products and vicks ointment that command both local and foreign market.

## **Statement of the Problem**

- Health is addressed by the 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> MDGs.
- Herbal therapy takes a central place in Kenya and particularly Kakamega County.
- Unfortunately no standardized technology for herbal therapy exists,
- Herbal practitioners have operationalised their respective innovations.
- Poor service delivered has eroded people confidence in local herbal product in favour of the imported ones especially the Chinese oriented and modern health care that are often inaccessible due to cost (expensive) and distance barriers.
- This puts the health of many Kenyans at stake by exposing them to foreign herbal product that may not address the specific needs of patients given the unique Kenyan environment.
- Similarly, foreign herbal products siphons considerable foreign exchange out of the country.
- As a last resort, patients have turned to the local herbal cures that are ill prepared.
- Thus significant barriers of Kenya's economic growth and development agenda and attainment of vision 2030 because people comprise the engine of development in terms of labour and market

## **Objectives**

- (i) To establish innovations applied in herbal therapy and
- (ii) To determine the linkages between herbal therapy and household welfare in the county.

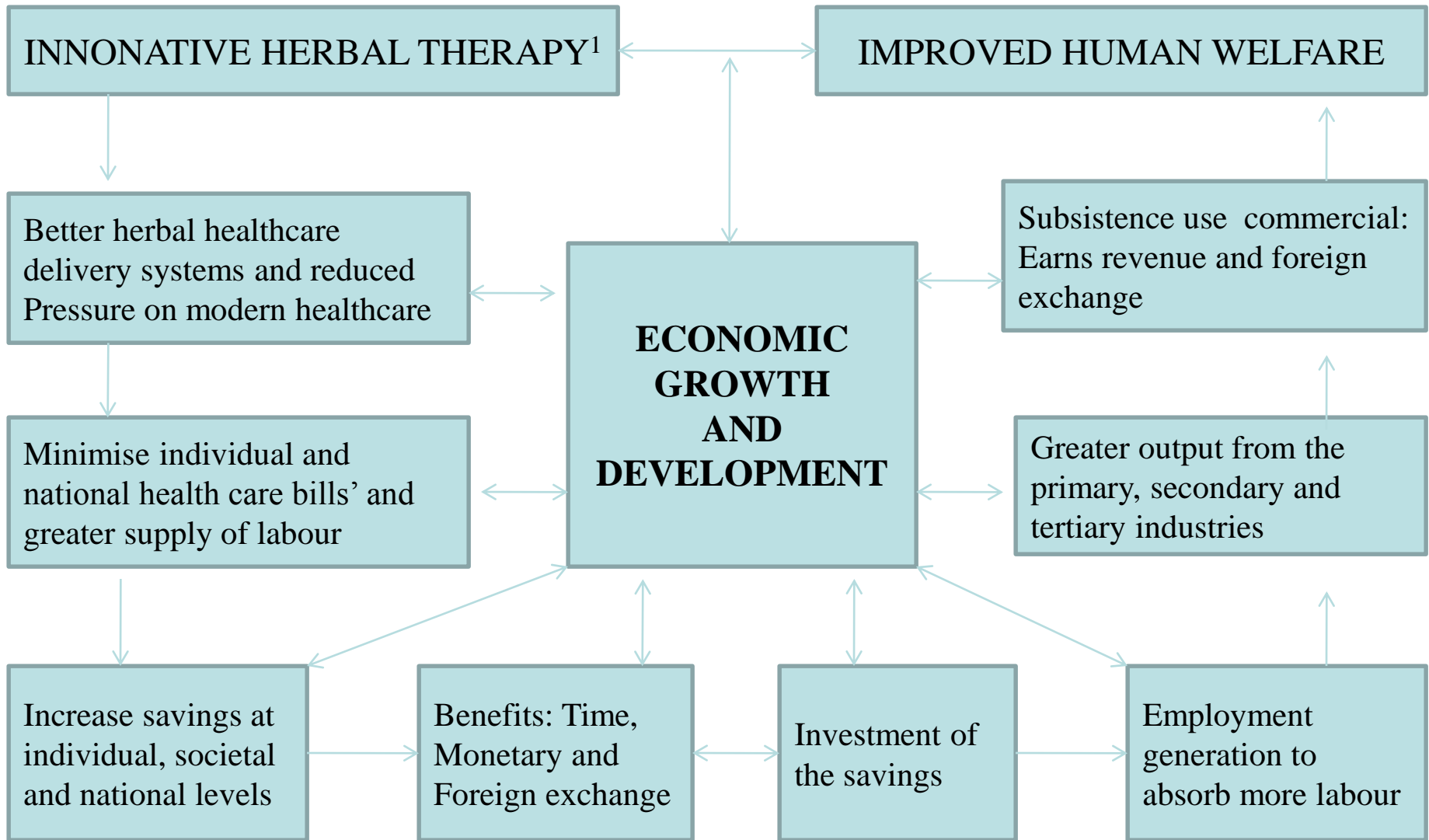
## Justification

- Herbal practitioners are the most available, accessible and cost-effective health care providers in Kenya particularly among rural communities.
- Modern health care sector is ill equipped-cum-expensive.
- Herbal therapies were reasonable substitutes that serve patients.
- Practically, they used traditional technologies that limited their attainment of full potential.
- Thus integrating innovative technologies in this important but otherwise neglected sector boosted her output, stirred fair health care competition and enhanced a cost-effective health care industry and improved human health in Kenya.

## • Study area

- expansive Kakamega County: nine sub-Counties located Western Kenya.
- Altitude (1520m-1680m) ASL, a mean annual  $t = 18.5^{\circ}\text{C}$  and rainfall 2000mm.
- Rivers Nzoia, Isiukhu and Yala drain into Lake Victoria.
- Kakamega forest is the most unique vegetation in the region.
- Some of tree species used for herbal purposes are *Trichilia Emetica* (Munyama) and *Olea Capensis* (Mutukuyu). The forest and often polluted drainage systems present unique health challenges to the local communities.
- Inadequate modern healthcare facilities in the County, diversity of flora and reliable water supply enhance the growth of the herbal therapy industry.
- High population size and density that calls for healthcare,
- Common ailments include fever, stomach and respiratory tract infections.

# CONCEPTUAL FRAMEWORK OF THE INNOVATIVE HERBAL THERAPY AND IMPROVED HUMAN WELFARE



## Methodology

- 50 herbal practitioners were purposively sampled Kakamega County in January 2013.
- It was stratified into nine sub-counties also called constituencies.
- Six herbal practitioners were interviewed in Shi, Lur, Iko, Mat and Mal sub-counties
- Five herbal practitioners were interviewed Lug, But, Mum and Khwi sub-counties.
- Village head-men facilitated the interview process.
- Herbal practitioners studied included herbalists, generalists, traditional birth attendants etc.
- Questionnaire, photography and observation schedules were used to identify the common technologies.
- Percentages were used to establish the innovations applied in herbal therapy.
- Thereafter, the Pearson's correlation coefficient was used to establish the relationship between innovative herbal therapy and human welfare.

## Results

**Table 1: Innovations integrated in herbal therapy by herbal practitioners**

Innovation	Real activities	Herbal practitioner
New ideas in herbal therapy	Better hygiene/sanitation	45 (90%)*
New Markets for herbal products	Product/sales promotion	35 (70%)*
New Method of producing herbal products	Gradual processing/Storage	24 (48%)*
New Source of raw materials for herbal products	Domestication of the plants	22 (44%)*
New Industrial organisation herbal healthcare	Patient centred service	19 (38%)*

Note: \*The innovations are poorly incorporated in the herbal delivery systems due to various challenges.



Plate 1: Display, processing and marketing of herbal products in Kakamega town



Source: Akala, 2012

Table 2: Innovations in herbal health care and human health/welfare

Description	Correlation test	Human welfare	Degree of innovation
Human welfare	Pearson correlation	1	0.393**
Degree of innovation	Pearson correlation	0.393**	1

Notes: \*\*Correlation significant at the 0.01 level (2-tailed) and N=50

Human welfare is measured in terms of patient recovering after using herbal therapy

## **Conclusion**

- Herbal health care sector was an open ended system based on poor technologies.
- This opened it to inappropriate technologies and abuse by quacks.
- Nevertheless, innovative technologies could better herbal therapy and translating this marginal health care sector into a vibrant economic hub in Kenya.
- Its multiplier and accelerator effects can stir Kenya's economic growth and development.

## **Lessons Learnt from the Findings**

- Rudimentary innovations perpetuated poor herbal therapy services in Kakamega County.
- This harmed human health and exposed the infant local herbal industry to unfair competition.
- Foreign herbal products were often unaffordable by the average Kenyan citizens.
- This was aggravated the strict scrutiny of the local herbal healthcare sub-sector *vis-à-vis* the freelance operation of foreign herbal products dealers in the country.
- Thus, Kenyans were exploited, suffered poor health and lived in desperation.
- Additionally, Kenya lost foreign exchange through the imported herbal products.

## **Policy Recommendations**

- Regulate entry and exit of herbal practitioners in the herbal therapy industry.
- Introduce professionalism, performance contracts and ISO Certification in the sector for sanity.
- Mandatory training of herbal practitioners on safe and cleaner technologies
- Formalise herbal therapy.



Thank you