

AFRICA DEVELOPMENT AFRIQUE ET DÉVELOPPEMENT

Vol. XLIX, No. 2, 2024



**AFRICA DEVELOPMENT
AFRIQUE ET DÉVELOPPEMENT**

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Leçons de la pandémie : science, religion et citoyenneté mondiale

*Texte révisé de la conférence de clôture prononcée lors de la
16^e Assemblée générale du CODESRIA qui s'est tenue du 4 au 8 décembre 2023*

*Revised Text of the Endnote Lecture delivered at the
16th CODESRIA General Assembly held from 4th to 8th December 2023*

Souleymane Bachir Diagne*

Résumé

Chacun de nous, chacune de nous a vécu la pandémie d'une manière personnelle, intime, mais elle comporte également des enseignements universels et le temps est venu pour les spécialistes des sciences sociales et des humanités que nous sommes de commencer à tirer les leçons de ce qui nous est arrivé quand le virus du corona a fait irruption dans le monde. C'est à titre de contribution à cette entreprise – que le Codesria a mille fois raison, comme toujours, de juger urgente et nécessaire – que je vais partager avec vous des réflexions qui ont fait l'objet d'interventions publiques de ma part au cours des deux terribles années durant lesquelles le virus a sévi, sur des sujets comme la citoyenneté et la religion face à la crise sanitaire, le discours de la science au défi du Covid-19 ou encore pour une « (cosmo)politique d'humanité » en réponse à la crise sanitaire et à l'urgence climatique. Ces interventions ont eu pour cadre des conférences académiques, bien sûr, mais également des entretiens dans la presse lorsque, comme bien d'autres, j'ai été sollicité sur ces sujets en raison de mes travaux en philosophie islamique, d'une part, en épistémologie et histoire des sciences, de l'autre.

Mots-clés : pandémie, virus, corona, covid, religion, vaccin, mondiale

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Abstract

Each and every one of us has experienced the pandemic in a personal, intimate way, but it also holds universal lessons, and the time has come for us specialists in the social sciences and humanities to start drawing lessons from what happened to us when the corona virus broke into the world. As my contribution to this process – which, as always, CODESRIA is absolutely right to consider urgent and necessary – I am going to share with you some of the thoughts I have expressed publicly during the two alarming years in which the virus has been on the rampage, on subjects such as citizenship and religion in the face of the health crisis, the discourse of science in the face of the Covid-19 challenge, and the case for a ‘(cosmo)politics of humanity’ in response to the health crisis and the climate emergency. These speeches were given at academic conferences, of course, but also in press interviews when, like many others, I was asked to comment on these subjects because of my work in Islamic philosophy on the one hand, and in epistemology and the history of science on the other.

Keywords : pandemic, virus, corona, covid, religion, vaccine, global

Les intitulés de mes interventions annoncent ce que seront les trois moments de mon propos. Le premier concernera *la citoyenneté et la religion à l'épreuve de la pandémie*. On comprendra que, d'une question comme celle-là, l'on ne puisse traiter que depuis un lieu précis et du point de vue d'une religion précise donnée. On comprendra donc également que mon examen soit conduit à partir de l'exemple d'un ou plusieurs pays comme le mien, le Sénégal, où la religion est majoritairement l'islam. Mais cela dit, je crois que la leçon que j'en tire est valide au-delà du cas particulier que je considère. Vous en jugerez.

Le second moment de ma présentation portera sur le discours de la science en temps de pandémie. Je lui donne pour titre *Le Savant et le Politique* en évoquant ainsi, bien sûr, Max Weber et en passant ainsi du monde de la religion à celui, désenchanté, de la science. Je me propose d'y examiner brièvement la question de la nécessité, pour la décision politique, de suivre l'avis de la science (un thème important du débat politique lors de l'élection du nouveau président américain contre l'ancien) en posant justement la question du caractère apodictique de cet avis. Enfin, je terminerai sur la proposition d'un *cosmopolitisme pour le vingt et unième siècle* comme étant la tâche qui s'impose à nous si nous savons tirer les leçons de la crise sanitaire et environnementale que nous vivons. J'y vois une actualisation, devenue urgente, d'un idéal cosmopolitique, d'une citoyenneté mondiale : je l'appelle une « cosmopolitique d'humanité ».

Citoyenneté et religion à l'épreuve de la pandémie

Un ouvrage collectif qui vient de paraître sous le titre *Les spiritualités en temps de pandémie* (sous la direction de Laetitia Atlani-Duault, Paris, Albin Michel, 2022) place au cœur de son propos l'idée que la crise du Covid aura été un *kairos*, un moment « décisif » et une « occasion critique¹ » où les religions se sont trouvées mises au défi de repenser les ritualités qui leur sont constitutives et jusqu'à la signification de la foi. La grande contradiction à laquelle elles ont dû faire face lorsque les seules armes contre la dévastation du Covid-19 étaient les mesures de distanciation sociale, les fameuses mesures barrières, est que celles-ci vont précisément contre le mouvement, naturel en période d'épidémie (considérée par les croyants comme un temps où Dieu se manifeste à travers un fléau qu'il envoie aux humains), de faire communauté dans la prière collective.

Au Sénégal, où je me trouvais au moment où les premiers cas ont été déclarés, on a pu craindre au début une résistance « religieuse » aux mesures dictées par la science épidémiologique (qui serait alors venue essentiellement des musulmans, puisque mes compatriotes catholiques ont rapidement suivi les bonnes décisions venues du Vatican) : renoncer à la prière du vendredi à la mosquée ? Renoncer aux célébrations programmées par les différentes confréries soufies auxquelles adhèrent une majorité de musulmans sénégalais et qui drainent vers les capitales religieuses comme Touba ou Tivaouane des centaines de milliers de fidèles ?

Le Sénégal est un pays laïc même s'il est démographiquement musulman (à 95 %). Sa laïcité, telle qu'elle fut définie en particulier par son premier président, le poète Léopold Sédar Senghor, il faut le préciser, ne reproduit pas le concept français du principe, mais insiste au contraire sur l'idée que les religions et les différentes traditions spirituelles, dans le respect de la séparation des Églises et de l'État, ont leur rôle propre à jouer dans la construction continue de la nation. Senghor parlait de leur rôle d'éducation, au sens large.

L'État devait donc s'adresser aux populations et ne justifier ses décisions que comme étant celles que commandait sa seule responsabilité devant les citoyens : fermeture de l'aéroport, interdiction des rassemblements, religieux en particulier, et bientôt état d'urgence avec couvre-feu la nuit pour mieux faire respecter les mesures barrières. Il était nécessaire aussi que, comme croyants, les citoyens fussent convaincus que le respect des mesures édictées allait dans le sens de l'esprit de la religion.

En effet, le caractère pour ainsi dire numineux de la pandémie, telle que perçue par un croyant, pouvait facilement mener à un refus des mesures en leur opposant une croyance au « décret de Dieu ». Ce discours

a été entendu dans bien des pays et pour bien des religions. Pour ce qui est de l'islam, je me souviens que la question semblait en effet urgente de savoir si cette religion supposée fataliste n'allait pas conduire au désastre des populations entières, persuadées de s'en remettre au décret de Dieu en ne se gardant pas du virus par les mesures barrières qui étaient alors notre seule protection. Cette question me fut posée très tôt au début de la période du confinement, lorsque je fus invité en avril 2020 dans la série d'émissions spéciales du *Temps du Débat* sur France Culture intitulée « Coronavirus : une conversation mondiale ». J'ai répondu que les temps imposaient en effet une réflexion sur la signification du « décret de Dieu » et que sur ce point il était heureux que le *kairos* de la pandémie (ce temps de crise où les croyants se tournent vers leur religion pour l'interroger sur ce qu'il faut penser et sur ce qu'il faut faire) ait rappelé et mis en lumière ces paroles du prophète Mohammed : « Si la peste se déclare dans une contrée, n'y allez pas, mais si vous y êtes déjà, n'en sortez pas. »

Le Covid-19 n'est pas la peste, bien entendu, et éviter de se rendre dans une contrée infestée par la peste n'est pas la même chose que d'adopter des mesures barrières. Mais ce qu'il y a d'important dans ce hadith (ainsi qu'on appelle les paroles attribuées au prophète de l'islam), c'est qu'il présente de la religion la face rationnelle en donnant au « décret de Dieu » le sens qui doit être le sien.

Ce sens, justement, qu'il faut opposer à un stéréotype parmi tant d'autres concernant la religion musulmane, celui qui en fait une doctrine du fatalisme, et donc du fanatisme, du fanatisme parce que du fatalisme. Le stéréotype, parfois intériorisé par les musulmans eux-mêmes, ne date pas d'aujourd'hui, il vient de loin. Il est répété non seulement par la *vox populi*, mais même par un philosophe comme Gottfried Wilhelm Leibniz, qui croyait pouvoir affirmer que la croyance aveugle des musulmans (qu'il appelait *fatum mahometanum* ou encore *fatum* des Turcs) dans l'inévitabilité de la fatalité, de ce qui « est déjà écrit », est telle qu'ils sont prêts à se rendre dans un lieu où ils savent qu'une épidémie fait rage, dans la conviction que ce qui leur arrivera ne dépend que du décret éternel de Dieu.² Je ferai trois remarques ici :

1. Leibniz est un philosophe du pluralisme et de l'ouverture qui se sert de l'image d'une religion islamique fataliste comme d'un repoussoir, pour insister sur l'idée que sa propre métaphysique d'un monde produit nécessairement par le calcul divin du meilleur n'est pas un système de prédestination absolue ne faisant aucune place à la liberté. Il établit aussi un contraste avec le *fatum stoicum* et indique que sa philosophie sur la question est pleinement en accord avec le *fatum christianum*.

2. Le lecteur de Leibniz ignorant de la parole prophétique précédemment citée pourrait penser que le philosophe de Hanovre a totalement imaginé l'exemple qu'il donne de l'inconscience fataliste consistant à se rendre dans un lieu où sévit une épidémie. Or il n'en est rien puisque visiblement il fait allusion justement à la parole prophétique sur la peste.
3. Leibniz, et c'est la troisième remarque, prend totalement à contresens ce que dit l'islam de l'attitude à adopter face à une épidémie, puisque ce *hadith* est exactement le contraire de ce que l'auteur des *Essais de Théodicée* présente comme la doctrine musulmane : *ne* vous rendez *pas* dans un endroit où une épidémie s'est déclarée. Mais si vous y êtes déjà, n'en sortez pas (sous-entendu : afin de ne pas répandre le fléau).

Quelles leçons retenir? Pour parler de l'exemple précis, il était important que les décisions aient été dictées uniquement par le bon sens et la science à l'État laïc sénégalais. Elles ont néanmoins pu apparaître aussi comme une traduction moderne du hadith de la peste, dont la leçon de rationalisme fut d'autant mieux entendue que La Mecque elle-même s'est fermée au pèlerinage, donnant à voir aux musulmans l'image sidérante de la Kaaba vide de ces nombreux pèlerins qui, à toute heure du jour et de la nuit, tous les jours, reproduisent sur terre les éternelles circumambulations des anges autour du trône divin.

Plus généralement, le Kairos de la pandémie enseigne que ne pas tenir compte du bon sens et de ce que la science nous dicte n'est ni une manifestation de l'intensité de notre adhésion à la religion ni l'abandon confiant à la volonté divine que la vraie foi exige. Qu'au-delà de la situation qui en est l'objet, le hadith de la peste et du décret divin fait injonction aux croyants d'avoir foi en la raison humaine. Car les religions concernent d'abord l'humanité de l'humain. C'est ainsi qu'il faut entendre la parole de Maimonide lorsqu'il dit que la Tora parle le langage des enfants d'Adam, ainsi aussi qu'il faut entendre la parole du Christ disant que le sabbat est pour l'homme et non pas l'homme pour le sabbat. La leçon de cet humanisme de la religion, au-delà de la période Covid, est importante pour l'avenir.

Le discours de la science face à la pandémie

Parlant de religion j'ai parlé déjà de la science et de la politique, objet de ce deuxième, bref, moment de mon propos.

Bien avant la crise du Covid, l'idée était relativement répandue, tout particulièrement chez certains croyants justement, que la science n'est qu'une voix parmi d'autres, un *récit* que valent d'autres récits. La science de l'évolution est ainsi la cible par excellence des propos sceptiques et relativistes

sur la vérité scientifique, qui tiennent que le récit d'une création du monde et des espèces telles qu'on les connaît n'a pas moins de validité que celui du transformisme et de l'évolution.

Avec la crise du Covid, l'opposition entre la confiance en la science et le déni de celle-ci s'est exacerbée et a pris, dans le climat politique que font régner les populismes aujourd'hui dans bien des pays, des allures de guerre tribale. Est tout à fait symbolique de ce climat le fait que la rivalité sportive entre les champions de tennis que sont Novak Djokovic et Rafael Nadal s'est aussi trouvée dramatisée en une confrontation entre le refus d'un vaccin dont le premier, remettant en question selon ses propres termes la science qui l'a produit, considère qu'il constitue une menace pour son intégrité physique et l'invitation du second à s'en remettre aux prescriptions de ceux qui savent mieux ce qu'exige la santé publique. Si le combat, qui est aussi politique, entre science et scepticisme ou antiscience tout simplement connaît une virulence particulière en ce temps de pandémie du Covid, c'est, entre autres raisons, parce que la science dont il est question est celle qui se cherche et non celle déjà établie. Lorsque je suis intervenu sur la question pour réagir aux complotismes les plus irrationnels qui se déversaient des réseaux sociaux en Afrique comme ailleurs, c'est là un point d'épistémologie qu'il m'a semblé important de souligner.

La science en train de se faire n'est pas celle axiomatiquement constituée, assurée de ses principes et établie sur des données empiriques éprouvées; dans le langage de Descartes, l'*ars inveniendi* n'est pas l'*ars demonstrandi* : voilà une évidence que deux longues et terribles années de crise sanitaire et d'essais pour y apporter réponse nous ont rappelée. Ces années nous ont amenés à poser les questions épistémologiques fondamentales : qu'est-ce que le scientifique? Est-ce l'indubitable? Comment convaincre de son évidence? Et de quelle nature est cette évidence?

Les réponses à ces questions ramènent à l'épistémologie de Karl Popper. Les controverses qui ont accompagné toutes les péripéties de ces deux dernières années depuis les confinements jusqu'à ce qui apparaît comme le salut par la vaccination illustrent parfaitement la thèse centrale du philosophe britannique : *la logique de la découverte scientifique* ne conduit pas de prémisses indubitables à des thèses qui en engendrent d'autres à leur tour, elle mène de *conjectures en réfutations*, pour jouer ici sur deux de ses titres. Faire des hypothèses pour ensuite chercher à les mettre à l'épreuve de tout ce qui peut les réfuter, telle est la démarche de la science. Le scientifique n'est donc pas l'indubitable, mais ce qui s'ouvre continûment au doute. On a ainsi vu des experts se contredire sur le port

du masque et autres mesures barrières, ou à un moment sur les vaccins, lorsqu'ils furent disponibles, non pas en dépit de leur expertise ou contre celle-ci, mais précisément parce que c'est ce qu'exige leur expertise : savoir, avec les faits, changer d'avis. Cela se comprend et se justifie dans le monde de la science, mais que se passe-t-il quand le discours de la science se présente dans l'espace public du débat et des décisions politiques ?

D'une certaine façon, dans un tel espace, il se trouve déplacé. J'ai parlé, à propos de la religion, d'une contradiction fondamentale. Celle que connaît le discours de la science en train de se faire est justement de risquer de nourrir, par les incertitudes qui lui sont consubstantielles, le scepticisme antiscience. Parce que lui-même fait un usage rationnel du scepticisme, il peut conforter par son doute *de méthode* le propos de ceux qui font profession de semer le doute et qui trouvent aujourd'hui dans les réseaux sociaux les outils qui servent leur dessein. On a vu ainsi les sceptiques prendre appui sur l'histoire des sciences pour faire valoir qu'un vaccin « inventé » en quelques mois ne pouvait pas être valide quand on sait – ou croit savoir – qu'il a fallu plusieurs années pour mettre en circulation ceux qui sont d'usage courant. Un tel propos apparaît rationnel bien sûr et comme tel il demande une réponse rationnelle. Mais celle-ci ne sera audible que pour qui comprend que l'image d'une science qui progresse selon une logique et une temporalité propres, depuis l'*Eureka* du chercheur jusqu'à la bonne application technique, n'a pas grand-chose à voir avec la réalité d'une démarche aujourd'hui largement déterminée aussi par les facteurs externes que sont les incitations de toute nature et en particulier le financement : dans le cas des vaccins qui nous permettent aujourd'hui de retrouver une nouvelle normalité, ces facteurs qu'étudie la sociologie de la science ont joué pleinement.

Je termine sur ce point en évoquant, dans l'ouvrage *Le Savant et le Politique*, la différence qu'établit Max Weber entre une éthique de conviction et celle de responsabilité. Car la contradiction est là, précisément. L'éthique de responsabilité qui dicte en principe ses décisions au politique peut s'accommoder des incertitudes, au contraire de celle du « tout ou rien » dont Max Weber disait qu'elle est la posture caractéristique de l'éthique de conviction.

C'est là l'expression même du lien entre un savoir scientifique fondé sur la falsifiabilité et la démocratie. C'est là une autre importante leçon de la pandémie que de nous avoir rappelé la force, qui est également la fragilité des démocraties, de « faire avec » les incertitudes et les tâtonnements par souci du vrai, contre les populismes dont la nature est d'afficher des certitudes, même fondées sur des « fake news » ou des « faits alternatifs », selon un oxymore caractéristique des temps que nous vivons.

Une (cosmo)politique d'humanité

Mais la leçon essentielle, et ce sera le troisième et dernier volet de mon carnet de bord de la pandémie, est la nécessité où nous sommes de penser une citoyenneté mondiale ou ce que j'appelle une cosmopolitique d'humanité. Pour la définir, il faut d'abord voir contre quoi elle est nécessaire et commencer par l'affirmation qu'elle suppose un combat contre l'inégalité.

La crise du Covid-19 a mis en évidence ce qui n'allait pas dans un monde qui a dû s'arrêter. Et qu'est-ce qui n'allait pas? L'inégalité. Pas seulement de ressources, mais fondamentale: devant la mort. Le virus a frappé aveuglément, certes, mais une approche d'ensemble montre que ce sont les populations les plus défavorisées qui ont payé le prix fort. Lorsque, par exemple, les États-Unis ont souffert plus que tout le monde de la pandémie et que New York en est resté l'épicentre pendant une période qui nous a semblé une éternité, il est devenu patent que les populations noires, latino et amérindiennes étaient frappées de manière totalement disproportionnée. C'est ce caractère de l'inégalité sociale devant la maladie et la mort, devenu visible au point d'en être choquant, qui est sans doute une des causes de l'explosion sans précédent qui a suivi le meurtre de George Floyd et explique pourquoi ce nom est devenu aujourd'hui synonyme d'une exigence de justice sociale et raciale, en Amérique et partout dans le monde. D'autres cas s'étaient produits sans entraîner la même réaction. Ce qui a fait la différence, c'est le contexte de la pandémie et la lumière crue qu'elle a jetée sur la signification vitale de l'inégalité et de ce qu'elle a d'insupportable.

Mais je voudrais m'appesantir plutôt sur l'inégalité entre les nations que sur celle au sein de celles-ci. Et pour cela, voir la pandémie et sa leçon sur ce plan depuis le continent africain.

Nous nous souvenons qu'il y a quelques mois, lorsqu'il est devenu évident que la crise du Covid-19 allait devenir une pandémie mortelle, on s'attendait, comme toujours, à ce que l'Afrique soit finalement la principale victime du virus. On s'attendait à ce que ses faibles infrastructures de santé publique ne fassent pas le poids face au virus et soient rapidement submergées. La perspective était que l'incapacité des États africains à mettre en œuvre les mesures sévères nécessaires pour protéger leurs populations serait synonyme de troubles sociaux pouvant conduire au chaos.

Les craintes qui se sont ainsi exprimées traduisent la reconnaissance du fait de l'inégalité face à la maladie et à la mort. Quelle que soit l'origine du virus, était-il ainsi reconnu, il finira par suivre dans ses ravages le chemin de moindre résistance pour devenir une nouvelle tragédie africaine, encore une. Ce qui est ainsi reconnu non sans un certain fatalisme, c'est ce que Senghor,

le premier président du Sénégal, avait appelé « l'ordre de l'injustice qui régit les rapports entre le Nord et le Sud³ ». D'abord, le propos de Senghor est de dire : ne regardons pas l'inégalité seulement comme une fracture, pour ainsi dire naturelle, entre un Nord riche et un Sud sous-développé, définie en termes économiques. Pour le penseur et homme d'État sénégalais, le fondement de l'ordre régnant de l'injustice mondiale est principalement culturel et seulement secondairement économique. Pour lui, un ordre économique mondial fondé sur l'inégalité est lié à ce qu'il appelait en 1983 le « mépris culturel⁴ ».

Et aujourd'hui, « l'ordre de l'injustice qui régit les rapports entre le Nord et le Sud » se manifeste dans la crise socioéconomique créée par les réponses nécessaires aux pandémies (et aggravée par les conséquences de la guerre en Ukraine).

La pandémie a mis en évidence cet « ordre de l'injustice », tout particulièrement lorsqu'il s'est agi de l'accès au vaccin et de la proposition, qui a été tout simplement bloquée par les États-Unis, le Royaume-Uni et l'UE, que les pays en développement ayant des capacités dans le domaine augmentent l'offre de vaccins en fabriquant des génériques à condition que l'Organisation mondiale du Commerce accepte de suspendre pour cause de pandémie, et donc cas de force majeure, les protections habituelles de la propriété intellectuelle. On se rappellera le propos d'Édouard Glissant opposant au « marché monde » qui se satisfait parfaitement des égoïsmes et des ethnonationalismes ce qu'il a appelé la « mondialité ».

Le président Biden, lorsqu'il était le candidat Biden, avait dénoncé dans le langage de l'éthique l'isolationnisme vaccinal du président Trump au nom de « la dignité humaine », déclarant qu'une politique pour l'accès de tous à la vaccination était « la seule chose humaine au monde à faire ». Dans une tribune du *New York Times* en date du 29 mai 2022, David Wallace-Wells, appelant comme beaucoup l'injustice vaccinale un « apartheid », appelle à s'aviser que le combat contre l'inégalité sanitaire va de pair avec celui contre l'injustice climatique (« What Vaccine Apartheid Portends For the Climate Future »). Je m'arrête sur ce mot d'apartheid qui représente la politique des murs contre l'idéal cosmopolitique. Comme telle, elle n'est pas seulement éthiquement et politiquement condamnable, elle est aussi absurde devant les défis qui sont aujourd'hui ceux auxquels nous faisons face. Car cette période extraordinaire de la pandémie que nous vivons nous montre que l'humanité est une et fragile devant un ennemi invisible qu'aucune frontière, même devenue un mur, n'arrêtera et qui nous révèle, si nous ne le savions pas déjà, combien notre terre est petite et notre monde fini. Elle nous rappelle également à quel point nous sommes vulnérables et

comment, après une première phase d'auto-isolement, d'exacerbation des nationalismes et de la pensée tribale, nous devons envisager un avenir de développement solidaire autour de la sécurité humaine et de la valeur de la vie. Une politique qui soit donc la réponse de l'humanité comme humanité, seule réelle, parce que globale, aux deux crises majeures de notre temps : la sanitaire, dont on nous dit déjà qu'elle sera selon toute probabilité suivie d'autres, et l'environnementale, dont on convient qu'elle commande une mobilisation mondiale.

On l'appellera une « cosmopolitique » avec Étienne Balibar, lorsqu'il déclare que « toute politique doit être désormais pensée et pratiquée comme une cosmopolitique, une politique du monde et de la mondialité », ajoutant qu'elle doit être « une politique de l'espèce humaine ». Elle ne se confond pas non plus avec une politique humanitaire, car celle-ci ne ferait à bien des égards que reconduire la ligne de partage Nord-Sud dont parlait Senghor.

Je voudrais soutenir que cette politique globale sera fondée sur un nouvel humanisme à penser ensemble et qui repose sur le concept d'une humanité solidaire et d'une humanité responsable. *Solidarité* pour « faire humanité ensemble » et responsabilité de savoir « habiter ensemble la terre », deux significations qui sont réunies dans les mots wolofs et bantous *nite* et *ubuntu* lorsqu'ils ont été philosophiquement construits comme concepts.

Ce que nous disent ces concepts est que « l'humanité de l'humain se réalise dans la relation aux êtres humains ». Qu'elle n'est donc pas un état, mais une tâche et qu'elle se réalise dans la réciprocité.

Du mot *ubuntu*, Mandela a déclaré que le champ sémantique qu'il recouvre est assez vaste, mais qu'il signifiait simplement et en définitive : « trouver un moyen de rendre la communauté meilleure ». Aujourd'hui, la communauté, c'est le monde, celui des humains, mais plus largement celui du vivant en général.

La cosmopolitique est aussi et d'abord une politique de la vie. Disons qu'elle est ce que le philosophe Frédéric Worms a appelé un « humanisme vital » qui traduit bien ce principe qui est le premier article du serment des chasseurs :

Une vie naît avant une autre, c'est vrai, et pourtant aucune vie n'est plus « ancienne », plus respectable qu'une autre. De même aucune vie n'est supérieure à une autre : ainsi parle l'un des articles du « serment » des chasseurs du Mandé, dont l'origine, selon la tradition, remonte à Soundjata Keïta.

La vie dont parle le *Serment des chasseurs* n'est pas la seule vie humaine. Ce à quoi il faut faire droit, ce sont toutes les vies sur terre, car la cosmologie dans laquelle *ubuntu* puise son sens est une cosmologie de la continuité du vivant. Le principe vital (*ntu*) parcourt la chaîne de tous les êtres, de la Force des forces au minéral. Rien n'est donc inerte dans un univers où tous les vivants, de Dieu au caillou, comme le dit Senghor, sont solidaires. Avant de se traduire dans les relations de personne à personne, l'*ubuntu* s'inscrit dans la vie elle-même et nécessite de veiller à toujours renforcer le principe vital universel.

C'est pourquoi l'*ubuntu*, faire l'humanité ensemble et habiter ensemble la terre, exige de prendre soin de la vie et de prendre soin de la terre. Tels sont les fondements de la citoyenneté mondiale qu'il nous faut inventer.

Notes

1. C'est le philosophe protestant Olivier Abel qui parle ainsi dans l'ouvrage.
2. Dans la « Préface » aux Essais de Théodicée sur la bonté de Dieu, la liberté de l'homme et l'origine du mal.
3. « La culture face à la crise », dans Liberté, T. V, Le dialogue des cultures, Paris, Seuil, 1993, p. 194.
4. *Ibid.*, p. 197.



Thandika Mkandawire's Model for an African Developmental State, and the Ethiopian Experiment (2001–2018)

Eyob Balcha Gebremariam*

Abstract

This article offers a theoretical and empirical examination of Thandika Mkandawire's model of an African developmental state. The driving question is: what does the Ethiopian experiment mean for Mkandawire's model, and what broader lessons does it hold? The analysis focuses on the ideology of the Ethiopian ruling party (1991–2018) and a review of two policy documents on rural development and execution capacity-building. Developmentalist ideology, effective state capacity and relative autonomy of the state are observed in the Ethiopian case. The rural development policy aimed for structural transformation and achieved a modest result. At the same time, the execution capacity-building policy is a fascinating example of how the Ethiopian model defied the 'institutional monocropping' and 'institutional monotasking' approach of donor organisations by pursuing institution-building not as a technical but as a political mission. However, the Ethiopian experiment was not without limitations. The most drastic structural impasse was in the inherent contradiction between the sociocultural and ethnolinguistic-based federalism and the centralising drive of developmentalism. This created irreparable fractures within the ruling elite, which brought the developmentalism experiment to an end in 2018. This article argues that the Ethiopian case is a relevant example which demonstrates the vital features of the African developmental state that Mkandawire theorised and promoted.

Keywords: Africa; developmental state; Ethiopia; Thandika Mkandawire

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Résumé

Cet article propose un examen théorique et empirique du modèle de Thandika Mkandawire d'un État africain en développement. La question centrale est la suivante : que signifie l'expérience éthiopienne pour le modèle de Mkandawire, et quelles leçons plus larges contient-elle ? L'analyse se concentre sur l'idéologie du parti au pouvoir éthiopien (1991-2018) et sur l'examen de deux documents politiques sur le développement rural et le renforcement des capacités d'exécution. L'idéologie développementaliste, la capacité effective de l'État et l'autonomie relative de l'État sont observées dans le cas éthiopien. La politique de développement rural visait une transformation structurelle et a obtenu un résultat modeste. En même temps, la politique de renforcement des capacités d'exécution est un exemple fascinant de la façon dont le modèle éthiopien a défié l'approche de « monoculture institutionnelle » et de « monotâche institutionnel » des organisations donatrices en poursuivant le renforcement des institutions non pas comme une mission technique mais comme une mission politique. Cependant, l'expérience éthiopienne n'était pas sans limites. L'impasse structurelle la plus radicale résidait dans la contradiction inhérente entre le fédéralisme socioculturel et ethnolinguistique et la poussée centralisatrice du développementalisme. Cela a créé des fractures irréparables au sein de l'élite dirigeante, ce qui a mis fin à l'expérience du développementalisme en 2018. Cet article soutient que le cas éthiopien est un exemple pertinent qui démontre les caractéristiques vitales de l'État développementaliste africain que Mkandawire a théorisé et promu.

Mots-clés : Afrique ; État développemental ; Éthiopie ; Thandika Mkandawire

Introduction

This article offers a theoretical and empirical examination of Thandika Mkandawire's model of an African developmental state, as stipulated in his article 'Thinking about developmental states in Africa' (Mkandawire 2001). The study focuses on the aspiration of building a developmental state in Ethiopia by the now-defunct ruling party (Ethiopian Peoples' Revolutionary Democratic Front [EPRDF]) and its (now late) leader, Prime Minister Meles Zenawi. The central question the article aims to answer is what the Ethiopian experiment means for Mkandawire's model and what broader lessons it holds. An attempt is made to answer this question by examining the EPRDF's revolutionary democracy ideology and critically reviewing two policy documents entitled 'Rural and Agricultural Development Policies and Strategies' (የገጠርና ግብርና ልማት ፖሊሲዎቻችንና ስትራቴጂዎቻችን) (November 2001) and 'Execution Capacity-Building Strategy and Programmes' (የማስፈጸም አቅም ግንባታ ስትራቴጂና ፕሮግራሞች) (February 2002).

Examining the Ethiopian experiment of state-led developmentalism serves at least four interrelated analytical purposes. First, the EPRDF regime's deliberate effort to aspire to the ideals of transformative development nullifies the pessimistic generalisation that developmental states are impossible in Africa (Van de Walle 2001). The article also challenges the neopatrimonial reductionist assumption about the pervasiveness of 'politics of the belly' in Africa (Bayart 1993).

Second, the impossibility theorem and the neopatrimonial school build their argument on the assumption that African states are 'too weak and too "prone" to capture by vested interests' (Mkandawire 2001:293) and, therefore, incapable of designing and implementing a transformational development agenda. This claim is a gross generalisation and fallacious.

Third, some declared the 'post-Cold War' world order as a period of triumphalism for the neoliberal ideology. Neoliberal market reform and structural adjustment programmes also barred states from taking contextual lessons from the success of East Asian countries. Against all the odds, Ethiopia's state-led developmentalism countered the hegemonic neoliberal global political-economic order.

Finally, with their unique sociohistorical and political context, Mauritius, Botswana, and Rwanda are viable examples of African state-led developmentalism (Routley 2014). However, the Ethiopian case stands out because of the size of the economy and the population, and it offers a recent empirical case for Mkandawire's theory.

Mkandawire contributed to the idea of developmentalism that Prime Minister Meles Zenawi promoted. He said, 'The late Ethiopian Prime Minister Meles Zenawi told me that he was influenced by my paper on developmental states' (Meagher 2019:530). The Ethiopian experiment of developmental statism converged with Mkandawire's model at the theoretical and empirical level in the centrality of developmentalist ideology, state capacity and relative state autonomy. However, the authoritarian nature of the Ethiopian experiment diverged from the normative value that Mkandawire put on democracy and his promotion of a democratic developmental state.¹

This article makes three interrelated arguments. First, it argues that EPRDF's developmentalist ideology evolved from its revolutionary democracy ideology, which helped envision a strong state committed to broad-based development. The developmentalist ideology rendered a transformational impetus to the long history of the Ethiopian statehood that the EPRDF inherited. The rural-centred and agriculture-focused development policy is a relevant example in this regard.

Second, EPRDF's developmentalism defied narrow, market-focused institutional reform to pursue a developmentalist institution-building. By foregrounding the state's primary role in development, the regime rejected the technocratic capacity-building package that donors pursued in the good governance agenda. Instead, the government built on execution capacity-building reform to engrain its developmentalist orientation within the state structure. The capacity to execute transformational development was the quintessential purpose of the EPRDF's institutional reform.

Third, the EPRDF attempted to establish its developmental mission by cordoning off its policy space from internal and external actors. Internally, the regime had relative autonomy to implement a policy of mobilising vast sums of capital from the banking sector to finance its development projects. However, massive embezzlement and corruption tainted this developmentalist aspiration. The government also implemented politicolegal reform that dried up the flow of foreign funding for local civil society and non-governmental organisations. Externally, the regime used 'policy sovereignty' to keep aid donors from influencing its interventionist approach to development. The EPRDF successfully negotiated several donor-supported development programmes without giving too much space for international actors to dictate the rationale of programmes.

Methodologically, the article analysed internal EPRDF party documents and official government policy documents to study the orientations of the government. Relevant sections of the documents were translated from Amharic into English. Then, the article drew on academic literature and reports that examined various aspects of the period. The article intentionally avoided delving into the post-2018 political economy of Ethiopia in order to remain focused on my analysis of the developmentalist features of the EPRDF era. Thus, the rest of this article has five parts. Section two provides a brief review of the developmental state literature. Section three delves into the Ethiopian case, covering historical precedents, the EPRDF's ideology, state structure and capacity and state autonomy. Section four reviews the successes and limitations of developmentalism in Ethiopia before the conclusion section.

The Developmental State Literature

Scholars of the developmental state debate have emphasised various vital aspects of the developmental state in their articulations. For example, Chalmers Johnson (1999), one of the pioneers of the discussion, identified

three essential features of developmental state-building in the case of Japan. Johnson noted that a developmental state focuses on achieving economic growth. It nurtures competent, autonomous, and empowered civil servants, and builds its capacity to make 'market-confirming' economic interventions.

Presenting the cases of South Korea and Indonesia, Vu (2007) also argued that the 'developmental structure' and 'developmental role' of the state are the most salient features. He contends that 'the two components – roles and structures – are interdependent that *together* explain successful developmentalism' (Vu 2007:28, emphasis original). From this, we can derive, from the East Asian experience, that developmental states have discernible developmental structures, the role of which is also designed to be highly effective and less constrained by short-term political interests. Plus, a developmental state's intention is not to replace the market. Instead, it is committed to disciplining the market for developmental purposes.

As the debate on the developmental state evolves, the salient role of politics, political processes and political contestations in building and sustaining a developmental state is becoming clearer. The works of Peter Evans (1995) on 'embedded autonomy' and Adrian Leftwich (1994, 1995, 2005, 2008) on the 'primacy of politics' are worth mentioning here. Evans emphasised that instead of considering the state as a detached actor dictating the role of the market through autonomous bureaucrats, it is essential to consider the state's intertwined relations with various segments of socioeconomic actors of society within which it is embedded. The set of processes that embed the state within society are hardly technocratic. They are essentially political endeavours that need to be greased with the distribution of resources while maintaining the balance.

Leftwich's definition of developmental states (2008) foregrounds the vital role of politics. According to him, developmental states are:

[states whose] successful economic and social development performance illustrates how their *political purposes* and institutional structures (bureaucracies) have been developmentally driven, while their *developmental objectives* have been politically-driven. (Leftwich 2008:12, emphasis added)

The above definition underscores the inextricably intertwined relationship between political purposes and developmental objectives. Ensuring the mutual reinforcement of politics and development requires a set of political processes that transcend the technocratic policy recommendations often promoted within the good governance agenda. Emphasising the political nature of developmentalism helps us adequately analyse some of the

developmental states' dominant characterisations. For example, Ellen Hillbom (2012) defined Botswana as a 'gate-keeping state'. It is vital to emphasise that gatekeeping, controlling the distribution of resources across various segments of society, and institutionalising the practices for a considerable period are essentially a political process. As Ian Taylor (2012) highlighted, this process requires a 'hegemonic project' sustained by ideational and material domination by the political elite.

Meles Zenawi, the architect of the Ethiopian developmental state, also stressed the primacy of politics. Zenawi argued that

... development is a political process first and economic and social process second. It is the creation of a *political set-up* conducive to accelerated development that sets the ball of development rolling. (Zenawi 2012:170, emphasis added)

Later in this article, I reflect on how the political set-up in Ethiopia contributed positively and negatively to the developmental aspiration. At this point, it is essential to acknowledge that the debate on developmental states has evolved considerably from a view that puts influential state bureaucrats in the driving seat to an understanding that the role of political elites in shaping the ideational and material context of developmentalism is crucial. Mkandawire also proposed a specific characterisation of developmental states, especially in the African context, which is discussed in the following section.

Key Features of Mkandawire's African Developmental State

Mkandawire argued that 'the "developmental state" has two components: one *ideological* and one *structural*. It is this *ideology-structure nexus* that distinguishes developmental states from other forms of states' (Mkandawire 2001:290, emphasis original). Developmentalist ideology is interpreted as a 'mission' of achieving sustained economic growth and development manifested in high rates of accumulation and industrialisation. Mkandawire highlighted the vital role of developmental ideology by recognising that structural factors – including colonial legacy, adverse incorporation into a hostile global political economy, and exogenous factors, such as natural disasters – constrain African states. Consequently, examining African states' developmental potential in this context requires a framework that captures the episodic manifestations of both success and failure.

Therefore, instead of characterising a particular state as developmental after its success, focusing on ideology enables us to examine whether a specific regime 'seriously *attempts* to deploy its administrative and

political resources to the task of economic development' (Mkandawire 2001:291, emphasis original). Interrogating ideological orientation also helps us avoid falling into a tautological definition of characterising a given state as developmental because it has achieved some degree of development (ibid).

Mkandawire's focus on the role of ideology runs against the characterisation of African leaders as less inspired by political ideas. He expanded his critical reflection in this regard in his influential work on the neopatrimonialism school (Mkandawire 2015). While arguing that the first generation of African leaders was 'nationalist-cum-developmental' (Mkandawire 2001:295), he added that the impossibility theorem about developmental statism in Africa has also been supported by 'stylised facts' that appear to explain Africa's inherent dysfunctional order (Mkandawire 2015).

State *structure*, the other vital component of a developmental state, is about the '*capacity* to implement economic policies sagaciously and effectively' (Mkandawire 2001:290, emphasis original). Factors that cumulatively shape the capacity of a state are its institutional, administrative, technical and political features. Mkandawire maintained that the two reasons neoliberal institutional reform in Africa cannot deliver transformational development are 'institutional monocropping' and 'monotasking' (Mkandawire 2012). 'Institutional monocropping' results from copying Anglo-Saxon institutions without recognising African countries' sociohistorical and political economy specificities and developmental needs (Evans 2004). 'Monotasking' is how installed institutions are confined to 'servicing a standard set of often imposed policies and tasks' (Mkandawire 2012:81). The 'rational choice institutionalism' that inspires monotasked institutions makes them perform in a restrained manner that may be irrelevant to African states' developmental aspirations and needs.

Mkandawire argued that the developmental orientation of a state is determined not only by its capacity but also by the extent to which it maintains '*autonomy*' from 'social forces ... [and] the claims of myopic private interests' (Mkandawire 2001:290, emphasis original) and 'myopic demands' (Meagher 2019:524). Thus, state capacity is conceived in formulating policies, execution capacity and resilience to remain focused and committed to the developmental orientation.

The Ethiopian Experiment

Historical precedent

History plays a paramount role in shaping the initial conditions of a particular state. Ethiopia's long history of statehood can be seen as one of the initial conditions that facilitated the emergence of a robust interventionist state. A state system that successfully resisted European colonisation in the late nineteenth century and the brief Italian occupation from 1935 to 1941 can hardly be disregarded when examining its developmentalist orientation and practice. Socioeconomic and political institutions not radically uprooted by colonisation can be a robust foundation for building a solid state.

In the Ethiopian case, the post-Italian occupation period was a critical time when the modernist state started to take shape. Ideologically, the imperial regime portrayed itself as a beacon of civilisation and modernity, characterising the emperor as 'the Sun King' (Bekele 2019). Regarding institution-building, the regime started to shape the technocratic and professional aspects of the emerging modern state. Agencies and commissions responsible for planning, banking, personnel, statistics and infrastructure (highways, airlines, railways, shipping, electricity and power and telecommunications) were established roughly between 1943 and 1969 (Clapham 2019; Bekele 2019).

Education was another critical element of developmental interventions. The post-liberation Ethiopian government invested 20 per cent of the national budget in education to expand elementary and secondary schools (Bekele 2019). Higher education also became part of the modernising project in the early 1950s. The student population from primary to tertiary level grew exponentially, from 60,000 in the early 1950s to 957,000 in 1974, the year of the revolution (Vestal 2005:235b–236b, cited in Bekele 2019).

The modernist intervention of the imperial regime faced a major constraint mainly because of the 'divergence' in the sources of its political and economic power (Clapham 2019). The elites from Semitic-speaking sociocultural and linguistic groups, primarily from today's Amhara and Tigray regions, had political dominance and power in the modern Ethiopian state that emerged in the late nineteenth century. With a population largely surviving on traditional and less productive agricultural technology, the area these sociocultural and linguistic groups inhabited had limited economic potential for generating enough resources for the state. As a remedy, the ruling elite expanded southwards, conquering and incorporating other kingdoms and autonomous polities. These new territories that became part

of the modern Ethiopian state under Menelik II grew into the economic base of the Ethiopian Empire primarily through exploitative political and economic systems. Indeed, the conquest was not only for economic extraction and political domination. The sociocultural groups of the newly incorporated regions were also subjected to cultural, linguistic, religious and psychological subjugation and subordination (Markakis 1973; Zewde 2002; Gudina 2007).

One of the outcomes of the 'historical divergence between the sources of political and economic power' (Clapham 2019:33) was the pervasiveness of landlordism as a critical feature of the imperial Ethiopian state. The political and economic elite heavily relied on landlordism—extracting surplus from every productive endeavour, especially agricultural labourers (Halliday and Molyneux 1982; Tareke 1991). Hence, the developmental aspiration of the regime to move into a capitalist system could not avoid the challenges of predominantly landlordist political and economic relations.

Landlordism posed obstacles to the modernist orientation of the imperial regime in at least three ways. First, there was a strong tendency to consume profits from agrarian surplus rather than investing in productive sectors. Thus, landlordism heavily constrained the potential emergence of a national capitalist class (Markakis 1973; Admasie 2016). Second, the destitute and heavily exploited peasantry was too poor to boost the internal market that the modestly modernising economy needed (Admasie 2016). The nascent middle class in urban centres constituted high-school and university-graduate government employees and had a negligible impact on the economic dynamics of the imperial regime (Markakis 1973). Therefore, expanding the internal market required the economic freedom of peasants in order to unleash their potential as producers and consumers outside the shackles of landlordism.

Third, given the landed aristocracy's political power, the state's relative autonomy was severely compromised in implementing radical policies that contradicted landlordism (Admasie 2016; Bekele 2019). For example, despite establishing a Ministry of Land Reform in 1966, the imperial regime could not pass any meaningful policy decisions because of the embedded interests of the ruling class (Tareke 1991; Admasie 2016; Clapham 2019). The successive five-year national development plans (1957–1961, 1963–1967 and 1968–1973) also had a limited impact on transforming the economy meaningfully (Bekele 2019). Perhaps the effect can be seen more substantively in the institutionalisation of development planning and the associated capacity in the Ethiopian bureaucracy.

The socialist Derg regime (1974–1991) played its part in strengthening the central government's power to control the country's critical resources and boost its penetrative capacity. One of the legacies of the regime was establishing the lowest level of government administration, called '*kebele*'. These *kebeles* gave the Derg regime a more substantial presence across the country. The nationalisation of land in February 1975 was another vital legacy of the revolution and the Derg regime. The presence of the state structure at the lowest level to effectively implement the decree of nationalisation of land was a critical example of the long-standing capacity of the Ethiopian state.

Unlike many African states, which were designed to serve a colonial function with limited penetration (Young 1994), the Ethiopian state has had a relatively more profound and extensive presence for a long time. The Derg regime also had a clear stand in controlling the economy, as stated in the Declaration on the Economic Policy of Socialist Ethiopia (Chole and Manyazewal 1992). However, the regime was too repressive and militarist to deliver any meaningful development. Moreover, the command economy was driven by a 'plan ideological' tendency to fulfil its socialist orientation rather than a 'plan rational' (Chole and Manyazewal 1992).

Ethiopia's extensive history of state-building and interventionism laid good ground for pursuing state-led developmentalism. The aspiration of modernism during the imperial regime, the Derg's control of key state institutions, and the strong presence of the state at the local level created a conducive structure for developmentalism. The EPRDF added the missing piece of the puzzle – a pragmatic developmental ideology – when it came to power in mid-1991.

The EPRDF's ideology of developmentalism

The EPRDF's developmentalist orientation evolved from the revolutionary democracy ideology that the party adopted in the late 1980s. In its 1993 document entitled 'Our Revolutionary Democracy Objectives and Next Activities' (አብዮታዊ ዲሞክራሲያዊ አላማዎቻችንና ቀጣይ ተግባሮቻችን), the EPRDF defined revolutionary democracy as an ideology that was devoted to the rural masses with the solid aim of transforming the lives of the rural community. The ideology built its orientation on the lived reality of Ethiopians in the early 1990s, with 85 per cent of the population residing in rural areas under abject poverty and deprivation. The EPRDF argued that development in Ethiopia was unthinkable unless the rural masses, with their abundant labour and land, were transformed through rural and agriculture-focused development.

Revolutionary democracy is an ideological orientation deeply rooted in the leftist origins of the EPRDF. It aspired to build a proletarian dictatorship that could challenge and provide an alternative to a bourgeoisie democracy (Berhe 2008; Bach 2011; Gebremariam 2018). Revolutionary democracy advocates for a 'vanguard party' that adopts the principle of 'democratic centralism'. Democratic centralism guarantees absolute freedom for core leadership members to debate, challenge and criticise ideas before the party decides. After reaching a decision, 'everyone must implement the decision ... no matter what their view' (Angle 2005:525). Democratic centralism helped the EPRDF to institutionalise party discipline and coherence within the government.

Revolutionary democracy also laid a strong foundation for developmental statism by shaping the EPRDF's relations with internal and external political forces. Despite coming to power at the prime time of neoliberalism, the EPRDF successfully resisted the 'one size fits all' prescriptions of the Washington Consensus. The most threatening external challenge came from the International Monetary Fund (IMF), which demanded the full liberalisation of the exchange rate, deregulation of the financial sector, and the opening up of capital accounts. The EPRDF was very cautious and selective in implementing the conditional IMF-backed economic reforms. The party ensured that the government had complete command to 'coordinate, shape and guide' economic forces with fiscal and monetary policies (EPRDF 1993:43–44). This ideological position created tension, especially with the IMF (Stiglitz 2002). As recorded by Robert Wade, IMF officials deliberately derailed the processes of facilitating conditional loans and debt cancellation processes in 'revenge' because the EPRDF, especially Meles Zenawi, literally said 'enough' to specific neoliberal demands of retrenching the power of the state (Wade 2001).

A vital turning point for revolutionary democracy occurred in 2001 after a rupture within the core leadership of the Tigray Peoples' Liberation Front (TPLF), the most dominant party within the EPRDF. Under the leadership of Meles Zenawi, the victorious group revised the ideological orientation and the party programme by reorienting the ultimate objective to build a capitalist market economy rather than a socialist Ethiopia, as previously envisioned in the early 1990s documents. The post-rupture period was coined as *renewal* (ተካድሶ). The EPRDF reinvigorated the government's institutional and policy frameworks accordingly and its relations with various social groups. The revised programme of the party recognised the crucial role of the 'national bourgeoisie', contrary to the 1993 strategy that categorised the comprador bourgeoisie as 'enemies' of

revolutionary democratic forces. Embracing the nascent capitalist class as vital 'social forces that play an indispensable role in development' was one of the first necessary steps in EPRDF's experiment of developmentalism (EPRDF 2001:11).

The EPRDF's revised programme made building a capitalist economy its ultimate objective. The party outlined a political programme not only for 'rapid economic growth' but also an improved economy that could "end dependency on aid" and "guarantee economic independence" (EPRDF 2001:8). The revised programme further stated that:

Our effort to build a free-market economy cannot be conceived without creating a private wealth owner that can massively engage in developmental activity ... We need to adopt a strategy that enables the role of the private wealth owner in our developmental activities and diminishes the role of the rent seeker (the dependent). (EPRDF 2001:9)

However, despite the rhetorical alignment with free market ideas, the EPRDF was adamant about subduing the dominant neoliberal development narratives. As early as 2006, the prime minister proclaimed the EPRDF's efforts to find an 'alternative development paradigm' to neoliberalism through 'democratic developmentalism' (Zenawi 2006). He linked the 2001 split within the TPLF to the 'slow and painful processes' (ibid) of articulating a development paradigm that fits the Ethiopian context.

Along with the revised programme and objective, the EPRDF strategised to create new alliances with different segments of society. In the rural areas, it primarily targeted 'rich and successful farmers', who were latterly identified as 'model' farmers and celebrated as 'development patriots' (Lefort 2010). In the urban areas, the EPRDF targeted business elites. An internal party document stated:

The organisational and political manifestation of the pre-renewal ideology relied on the destitute and impoverished peasants. This force can be a reliable base for socialist change. However, it can hardly be a leader and promoter for change within a free market framework. (EPRDF 2008:5)

The revised ideological orientation of building a capitalist state required the EPRDF to shift its alliance from social forces that it claimed were 'poor' and 'oppressed' to productive and wealthy segments of society. Accordingly, rich farmers in the rural areas and wealthy business elites in the urban centre became the vital social forces for the EPRDF's developmentalist mission.

In addition to the ideological reorientation, the EPRDF's state-directed developmentalism responded to the political threat that the hastily organised political groups posed to its legitimacy. The 2001 split within TPLF and,

most importantly, the 2005 election proved that the ruling elite's popularity would always be at risk. As a result, rapid economic growth and bringing tangible change in people's lives became the strategy for deriving legitimacy. The EPRDF adopted a securitisation discourse to depict the processes of achieving rapid growth and development as a mission of escaping an avalanche and avoiding Armageddon (Simon 2011; Gebresenbet 2014). As quoted in De Waal (2013:154), Meles Zenawi reportedly argued, 'I am convinced that we will cease to exist as a nation unless we grow fast and share our growth'.

One of the policies implemented through the revised ideological orientation and the developmentalist turn was the 'Rural and Agricultural Development Policies and Strategies' published by the then Ministry of Information (MoI). The following subsection analyses this document to demonstrate how the developmentalist ideology became policy and practice.

Rural and agricultural development policy

The EPRDF's rural development and agriculture policy was central to its developmentalist ideology and the entire economic development model, which was called Agriculture Development Led Industrialisation (ADLI).

I argue that two essential elements made EPRDF's ADLI strategy developmentalist. The first was the aspiration to achieve structural transformation. The ADLI strategy aspired to enhance agricultural sector productivity to release surplus labour to the non-agricultural sector. At the same time, it raised rural incomes and thus stimulated demand for urban products and services. The strategy also aimed to shape wage growth and competitiveness of the manufacturing sector by increasing food productivity and supply. The high productivity induced a movement of labour to non-agriculture industries, and the improved supply of agricultural products was intended to establish a backward and forward linkage between agriculture and manufacturing, especially in agro-processing. Finally, the developmental attribute of the ADLI strategy was its determination to create an interdependent and resilient domestic market that could minimise Ethiopia's dependence on aid.

The second vital attribute of developmentalism within ADLI was its commitment to be essentially broad-based and thereby transformational. The historical roots of the EPRDF as a rebel group in the rural parts of Ethiopia and the lived experiences of the party leaders during the tragic famine of 1984–1985, could be seen as essential factors in its commitment to broad-based development. The structural fact that more than 85 per cent of Ethiopians were living in rural areas at the time of the policy formulation

was also a valid basis for development. The EPRDF's commitment to broad-based development centred on the rural masses showed its determination to address what Mkandawire called the 'unholy trinity that nationalist leaders fought in the post-independence era—"poverty, ignorance and disease"' (Mkandawire 2001:296).

The policy document outlined four essential features of the rural and agriculture development plan, which underpinned the centrality of the policy for the success of state-led developmentalism. The subsequent paragraphs briefly summarise these basic features before providing brief accounts of the practices on the ground.

First, the EPRDF argued that ADLI's focus on rural Ethiopia and the agriculture sector should effectively utilise the country's primary resources—that is, land and labour. In the policy, the EPRDF argued that:

We can achieve rapid growth by prudently using scarce capital and intensively using abundant labour and land. We can pursue this kind of development only if we adopt a strategy focusing on agriculture and centring the rural areas where most of our people and the land are located. (MoI 2001:11–12)

Second, the EPRDF's developmentalist logic claimed that transforming agriculture would have a strong ripple effect on other sectors of the economy. When the lives of the rural masses improved with high productivity, this would have multiple positive effects on national capital accumulation: expansion of local markets with increased demand from the rural community; low food prices as a result of increased productivity; and a boost to foreign reserves with increased production cash crops, etc.

Enhanced productivity in the rural sector was also expected to create a labour surplus in the agriculture sector that could move to the trade or be absorbed into the manufacturing sector. Rural and agricultural development could also establish a two-way relationship with the manufacturing sector. On the one hand, the sector could provide quality raw materials at a reasonable price for manufacturing. On the other hand, the rural community's demand for more commodities and services would incentivise urban-based manufacturers and service providers to produce more and expand their business. Based on this logic, the EPRDF claimed that Ethiopia's rapid growth would be beyond reach unless agriculture was in the lead while integrated and growing in coordination with trade and industry (MoI 2001:16–22).

Third, the EPRDF prioritised rural-centred and agricultural-focused development to stop aid dependence. It intended to build a well-integrated and self-reliant national economy that could resist exogenous shocks coming

from the global market. The policy aimed to enhance the productivity of rural households to increase their consumption of manufactured goods, which could be a massive market for local industry.

A rural-centred development strategy can create an interdependent and complementary economy that massively benefits the public by increasing purchasing power. This can help us expand our domestic market, which can withstand any modest wind from the global economy. As a result, we can stop our dependence on aid and improve our economic independence. (MoI: 2001:26)

The fourth principal feature of the rural-centred and agriculture-focused policy was creating a broad market economy base. The EPRDF claimed that sustained and accelerated economic growth could not occur outside a market economy. However, the essential attribute that the party aimed to instil was the inclusivity of the market economy. The policy document argued:

Our rural-centred and agriculture-focused development strategy will enable millions of our farmers to participate in a market economy by actively enhancing their productivity. This makes our strategy essentially broad-based and avoids the risk of being a shallow programme. Our policy will also ensure that our farmers are not bystanders in the market economy but rather crucial players in the process. (MoI 2001:28)

The overall performance of the agriculture sector during the developmentalist reign of the EPRDF was not as impressive as it could have been. Despite contributing meaningfully to the overall growth of the national economy, the sector-specific growth was hardly consistent. Between 2003 and 2008, the agriculture sector grew 11.6 per cent, whereas between 2011 and 2016 the growth record was only 5.2 per cent (Dercon and Gollin 2019). Several factors contributed to the low performance of the agriculture sector despite the priority given to it in the regime's developmental orientation. Some of these factors include the slow introduction of extension projects that introduced modern technologies and inputs, and the time required for infrastructure projects to come fully to fruition to affect agricultural productivity positively. The rapid increase in population, the failure to provide land to the relatively highly educated young people in rural areas, and limited off-farm opportunities were also significant challenges (Lavers 2023). Nonetheless, the sector received massive attention and focus from the regime. Its successes included the mobilisation of 50,000 agricultural extension workers, the establishment of 9,000 Farmers' Training Centres (FTCs) (one in every two *kebeles*), the construction of 15,000 health posts and the deployment of 30,000 health extension workers across the rural areas of the country (UNDP 2014; Lenhardt *et al.* 2015).

State structure and capacity

The Ethiopian experiment of building a developmental state made state structure and capacity the nucleus of its mission. A thorough review of the 'Execution Capacity-Building Strategies and Programmes' policy document' (the ECB policy) reveals two essential features of state-led developmentalism. First, it argued that institution-building is both a means and an end of development. The policy document contended that enhancing execution capacity was a quintessential aspect of institution-building and necessary for development. Second, the document identified three development forces: the government, the public and the private sector. While recognising the vital role of all three development forces, it singled out the government as the primary development force whose capacity should be prioritised. The government was also assigned the extra responsibility of 'leading and coordinating' the other development forces and building their capacity.

The ECB policy demonstrated the EPRDF-led government's political determination to acquire the '*capacity* to implement [socio] economic policies sagaciously and effectively' (Mkandawire 2001:290, emphasis original). Political determination was outlined by articulating a developmental orientation, identifying vital development forces and establishing a clear hierarchy among the development forces where the government was the leading actor. The ECB was also a translation of the EPRDF's developmental ideology into the day-to-day practices of government action by rejecting the 'night watchman' role of the state. Instead of conforming to the notions of 'institutional monocropping' and 'monotasking', the EPRDF was determined to engineer Ethiopia-specific institutions tasked with developmental responsibilities.

The ECB policy document had three sections. The first outlined the conceptualisation and definition of execution capacity-building, its relations with development and other socioeconomic policies, and the goals and intended activities. Section two focused on 'education and training',² and civil service reform (CSR), which included tax system reform (TSR); and a judicial sector review (JSR), was covered in section three. For brevity, I primarily focus on the first section of the policy document.

The ECB policy argued that execution capacity is essentially relational. It claimed that 'execution capacity emanates from society's effort to transform nature and its social relations to maximise the advantages and convenience of its members' (FDRE 2008:1). Execution capacity was further elaborated as enhancing the capability to use natural resources, increasing production and productivity and transforming social relations

to ensure fairness and justice. By centring relationality, the ECB policy contended that execution capacity was not about the abundance of pieces of machinery and instruments. Instead, it was the purposeful, effective developmental utilisation of human resources and machines. For example, commenting on firms' technological capability, Zenawi (2012:158) argued that better productivity was not necessarily derived from a firm's machinery or employees but from 'organising abilities, which in turn are depending on the institutional set-up of the economy'. The ECB intended to shape the Ethiopian economy's institutional features to deliver on the regime's developmental goals.

It is imperative to note that the ECB policy focused explicitly on '*execution*' capacity, which differs from the commonly used notion of capacity-building that donor agencies sponsored within the good governance package. The latter was part of the 'institutional monocropping' (Evans 2004; Mkandawire 2012) informed by a 'narrow technocratic and functionalist' understanding of governance (Olukoshi 2003:230). What the EPRDF framed as 'execution capacity-building' was a holistic, purpose-driven developmentalist mission of altering the interplay among development forces by focusing on human resources, procedures and organisation. The mission was to equip the state with the capacity to pursue transformative development rather than imitating Western states.

The ECB policy's ultimate objective was institution-building. The policy identified three key execution capacity features: human resources, procedures and organisation. Human resources was about individuals' knowledge, skills, experiences and, most importantly, work ethic, industriousness and civic culture. These features of human resources become vital components of execution capacity only if they are utilised within a context of enhanced procedure and organisation with a clearly defined mission.

The institution of an effective [state] capacity emanates from the synergy between human resources, procedures and organisation. The capacity to be effective can hardly exist outside of institutions. The mission is to build the required human capacity by creating and strengthening institutions. Hence, human capacity building cannot be achieved without creating institutions and overarching effective state capacity building. (FDRE 2008:4)

The ECB policy defined the second key feature of execution capacity – procedure – as 'laws, norms, directives, procedural habits, and manuals that are fundamental for establishing and the manifestation of social relations' (ibid). The policy argued that building execution capacity meant transforming these critical components of social relations to incentivise efficiency,

effectiveness, perseverance and a strong work ethic. A knowledgeable and skilled human resource can hardly contribute to enhanced capacity in a cumbersome and ineffective procedural entanglement. The policy engrained the relationality of execution capacity-building by targeting the norms and values that shape social relations and tuning them to a developmental orientation.

Organisation was the third key feature of ECB policy, which provides the space in which improved human resources and transformed procedures play their respective role. The policy document underscored the intertwined relationship between the three key features and argued that they were inseparable and complementary.

The task of training and empowering human resources and transforming procedures and organisations occurs side-by-side and in a coordinated manner but never in isolation. The task should also be complementary. ... The complementarity and coordination of the task targeting the three features of execution capacity building can happen only if it occurs in the institution building framework. Creating and strengthening institutions gives the space to triangulate the three key features. (FDRE 2008:5–6)

The ECB policy document approached development and execution capacity as two sides of a coin, that cannot exist separately, especially in pursuing transformational development. The policy document claimed that the distinction between execution capacity and development existed only at the analytical level but was inseparable practically.

Similarly, the task of execution capacity-building needs to be seen as one aspect of development work and its nucleus. Execution capacity is both a necessary means and a desired outcome of development. Thus, it can hardly exist without development. Likewise, development cannot occur without execution capacity. Sustained development will become elusive if it fails to enhance execution capacity (FDRE 2008:11–12).

Comprehensive ECB strategy with priority for government capacity

The ECB policy document adopted a comprehensive capacity-development strategy by identifying three development forces: the government, the society and the private sector. However, the government was assigned 'the responsibility to coordinate and lead' (FDRE 2008:18) the other two development forces. The rationale to prioritise the government derived from the policy's definition of the overall developmental orientation as different in 'horizon and content from those that give the market a free ride or assign the government to do everything' (FDRE 2008:17). The strategy

argued that the Ethiopian model would be neither of the two extremes. Instead, the ECB strategy aspired to empower and enhance the capacity of all development forces by prioritising the government's capacity.

The strategy provided further clarity by emphasising that not every aspect of the government would be prioritised equally. Instead, the strategy primarily focused on the government's execution capacity. The strategy claimed that the government's enhanced execution capacity was necessary to effectively implement all the other development strategies (rural and agricultural development, urban and industrial development, building democratic order, etc.).

The strategy of building execution capacity covers all development forces while prioritising the government. It addresses all the capabilities we need to execute every development work but primarily focuses on execution capacity building ... From all development forces, we focus on the execution capacity of the government; from the execution capacities of the government, we focus on execution capacity building. (FDRE 2008:21)

The extra emphasis that government execution capacity-building received in the post-renewal EPRDF was epitomised by the establishment of a Ministry of Capacity Building, which served almost as a supra-ministry. The ECB policy document argued that a specifically delegated ministry would foreground the task of building execution capacity coherently and consistently across the government.

The EPRDF's developmentalist understanding of capacity helped the regime to successfully engrain its political agenda into a World Bank-funded programme. The Public Sector Capacity Building Programme (PSCAP) was a USD 483-million programme intended to 'transform three critical aspects of state-society relations: *inclusion, accountability* and *cohesion*' (World Bank 2004:40, cited in Vaughan and Rafanell 2012:69, emphasis original). While the programme focused on transferring technical skills, policy orientations and practices into Ethiopian body politics, the EPRDF approached the programme with a developmental mindset of ensuring the execution capacity of the state.

PSCAP was an ideal example of 'institutional monocropping' with the purely technocratic approach of making the government more efficient in service delivery and ensuring the accountability of public officials to citizens. The end outcome of the programme was that it consolidated upward accountability to senior officials and a top-down policy planning that favoured consensus rather than contestation and participation (Vaughan and Rafanell 2012). The PSCAP programme also exhibited the

‘monotasking’ feature that Mkandawire highlighted in its emphasis on the service delivery aspect of the government’s role, with minimum attention given to a more transformational and developmental role.

Concerning the donors’ capacity-building agenda, the EPRDF pursued a diametrically opposite aspiration by executing a capacity-building policy. The donor agencies promoted technocratic, universally applied, expert-led programmes of capacity-building. The EPRDF, in turn, designed and successfully implemented a relational, context-specific and political programme of execution capacity-building.

State Autonomy

The state’s relative autonomy from short-term and ‘myopic interests’ was one of the hoped-for outcomes of the capacity-building endeavour and the pursuit of a developmental vision. Meles Zenawi endorsed Dani Rodrik’s distinction between an autonomous and subordinate state in his conceptualisation of state autonomy (Rodrik 1992; Zenawi 2012). With a strong aspiration to be an autonomous state, the EPRDF regime attempted to keep the influence of internal and external actors from disrupting and compromising its developmentalist orientation. Socioeconomic policies and politicolegal frameworks played a vital role in ring-fencing the policy making space and maintaining the developmentalist orientation as the essential ground for policy decisions. The outcome was a partial success.

The EPRDF regime implemented various public policy instruments to keep the private sector at bay and generated substantial revenue that contributed meaningfully to its developmental orientation. One prominent example was the National Bank of Ethiopia directive in April 2011. The directive required every private bank to buy treasury bills from the National Bank of Ethiopia (NBE) ‘corresponding to 27 per cent of their monthly plans of loans or advance disbursements’ (Chauffeur and Gobezie 2019). The NBE then transferred part of the bills purchased to the government policy bank, the Development Bank of Ethiopia (DBE). The DBE disbursed the money to the private sector which was involved in government-selected priority sectors, and to finance other federal development projects. By the end of 2018, the NBE had mobilised ETB 79.3 billion (approximately USD 2.8 billion) from private commercial banks.

However, the EPRDF’s relationship with economic actors was not entirely rosy. Corruption, embezzlement, nepotism and mismanagement of resources were rampant, especially during the post-Zenawi period.

A particular example is that of the Metal and Engineering Corporation (MetEC). MetEC was established in 2010 to facilitate 'technological capability accumulation' (Zenawi 2012:161–163) through transfer of knowledge, technology and skills. The government attempted to align the allocation of rents into 'socially productive investment' (ibid:162) in line with the developmentalist orientation. To this end, MetEC was created as a conglomerate of military industries and civilian state-owned enterprises and industries. The government assigned senior military officials, most of whom were TPLF fighters during the civil war period, to lead the massive business enterprise (Gebregziabher 2019).

In 2013, MetEC had 15 industries with 100 subsidiary companies, which became primary actors of the developmental regime in producing machinery, electronic and electrical equipment, military and civilian automotive, agricultural machinery, etc. The corporation quickly became a key player in building mega projects for the government, such as sugar factories, fertiliser factories and energy plants, including the Grand Ethiopian Renaissance Dam (GERD) (Yonas 2013; Gebregziabher 2019).

Several observers have pointed out the massive corruption and embezzlement by MetEC to demonstrate the failure of the EPRDF's developmental agenda. There is an element of truth in the large-scale misuse of public funds, nepotism and large-scale corruption. For example, in 2021, MetEC owed the government and banks around USD 1.8 billion in unpaid taxes, loans and overdue payments (Tadesse 2021). The identification of former TPLF fighters as the primary faces of MetEC and its corrupt practices also contributed to the ethnicisation of MetEC in the already polarised political sphere. In short, the effort of the EPRDF regime to build technological capacity through mobilising state resources and controlling the distribution of rents failed massively for several reasons, among which the corrupt nature of the officials was a crucial factor.

In the political sphere, the EPRDF used politicolegal frameworks to remain relatively shielded from scrutiny by media and civil society organisations (CSOs). The party used its dominance in the legislature to pass legal frameworks that became instruments of suppression against competing political ideas and actors. The most important legal documents included the Freedom of Mass Media and Access to Information Proclamation (No.590/2008), the Civil Society and Charities Proclamation (No.621/2009) and the Anti-terrorism Proclamation (No. 652/2009).

In closing down the political space using laws and a high level of repression against its opponents, the EPRDF boosted its dominance. The legal frameworks also contributed to institutionalising the securitisation discourse and silencing rival actors and spaces of alternative ideas. The party filled the space vacated by independent CSOs by directly controlling state-led initiatives, such as youth, women and inhabitants' forums (Gebremariam 2017, 2023). Thus, instead of being democratic, the EPRDF pursued its developmental aspiration in an authoritarian manner.

Successes, Limitations and the Politics of Developmentalism in Ethiopia

Mkandawire argued that the “trial and error” nature of policy-making⁷, a common aspect of development policy-making, should inform our evaluation of African states' developmental endeavours (Mkandawire 2001:291). A developmental aspiration might fail to achieve a tangible record for several reasons: the wrong set of policies, weak implementation capacity, hostile global political economy, war and other exogenous factors such as natural disasters (ibid). Against this backdrop, I briefly analyse the success and limitations of the EPRDF's experiment of building a developmental state vis-à-vis the ideological aspiration and the two policy documents analysed.

The effort to pursue developmentalism in Ethiopia resulted from the historical legacy of an interventionist state and the EPRDF's versatile and pragmatic ideological orientation. Since the 1940s, there has been a continuous strengthening of the state's capacity, institutionalising central planning and executing nationwide development projects. After the revolution, the Derg regime entrenched the state machinery in every corner of the country to pursue its political objectives of control and mobilisation. Cross-border war with Somalia and the 17 years of civil war might not have provided enough stability for the Derg regime. However, the solid socialist orientation of the government could be one vital reason why the Ethiopian state was not weakened as much as many other African countries during the 1980s structural adjustment period. For the EPRDF, the first 15 years (1991–2005) was a period of instability: constitution-making, a border war with Eritrea, internal party rifts (mainly within the TPLF) and a highly contested election (2005). However, post-2005 was a period in which the government actively pursued developmentalism through rationalised planning and execution of policies.

A record of double-digit economic growth for more than a decade was one of the most remarkable achievements of the Ethiopian experiment of developmentalism. Ethiopia’s economy grew and expanded by 10.9 per cent on average for 12 consecutive years between 2004 and 2015 (see Figure 1). The record was massive for a non-oil-producing and landlocked country without significant mineral resources. The more impressive nature of economic growth directly linked to the developmentalist orientation can be seen if we examine the *quality* of the growth. The positive implications of the growth are reflected in how they translate into substantively affecting the lives of Ethiopians. Evidence shows a substantive decline in poverty headcount, massive pro-poor expenditure, a meaningful effort to address vulnerability through social policies and enhanced state effectiveness in addressing humanitarian crises.

However, the urban areas experienced a more positive impact on poverty reduction than the rural areas, and thus, overall inequality increased at the national level, with more gaps observed in urban areas. The evidence for poverty and inequality shows that accelerated economic growth had a substantively positive impact on poverty reduction but with less impact on reducing inequality. The high incidence of poverty in rural areas was ‘almost twice as high as that of urban poverty’ (Araya and Woldehana 2019:350), and increasing inequality in the urban areas was one of the pitfalls of the impressive record of double-digit growth.

Even so, the population living under the national absolute poverty line declined from 45.5 per cent in 1995/6 to 23.5 per cent in 2015/16 (Araya and Woldehana 2019). During the same period, the Gini coefficient of consumption expenditure increased from 0.29 to 0.33, with a higher increase of 0.38 in urban areas.

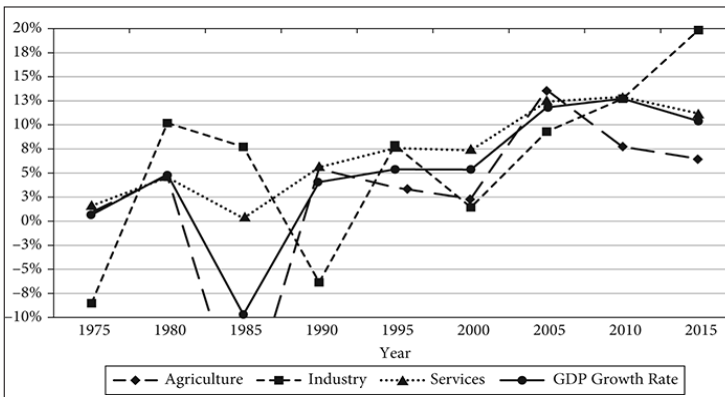


Figure 1: Ethiopian economic growth trajectory, 1975–2017
 (cited in Cheru, Cramer and Oqubay 2019:4)

Public spending towards improving human capital and infrastructure was one of the critical manifestations of the EPRDF's developmental aspirations. The regime's pro-poor expenditure was significantly high, with 66.9 per cent of its public spending allocated to education, health, agriculture, roads and water between 2008/9 and 2015/16.

Table 1: Total % share of real poverty-targeted expenditure at 2010/11 prices

Real expenditure	2008/9	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Education	15.5	20.7	23.4	22.2	24.7	26.6	32.2	35.7
Health	4.7	5.6	6.3	5.7	8.1	8.5	10.7	11.5
Agriculture	9.1	8.4	8.3	8.2	10.5	11.1	10.7	16.5
Roads	11.9	16.8	18.5	21.5	24.6	24.1	24.9	22.1
Water	2.8	5.9	5.9	7.6	9.0	8.9	8.7	11.3
Total	44.1	57.4	62.4	65.3	77.0	79.2	87.3	97.1
Total public expenditure	70.4	87.2	93.9	92.7	110.0	115.9	132.3	147.8
Share of pro-poor expenditure (%)	62.7	65.8	66.5	70.4	70.0	68.4	66.0	65.7
Share of pro-poor exp. in GDP (%)	10.9	12.6	12.3	11.9	12.4	12.0	11.4	12.1
Total public expense in GDP (%)	17.4	19.1	18.6	16.9	17.8	17.5	17.3	18.4

Source: Araya and Woldehana 2019:333

The evidence shows that the EPRDF regime went against the principles of a 'night-watchman state'³ and massively invested in the economy to address some structural bottlenecks, such as human capital and infrastructure.

The underlying factors that contributed to the poverty-reducing growth episodes and pro-poor spending were the enhanced state capacity and relative autonomy in the policy-making space. The EPRDF's clarity in its *execution*-focused capacity-building programme gave it the edge to effectively utilise the donors' rhetoric, agenda and financial resources to build a developmental state apparatus. The PSCAP – a technocratic capacity-building programme financed by the World Bank to implant the good governance package into the Ethiopian state system – is a valuable example. The programme ended up strengthening the establishment of a supra-ministry that served as a linchpin to the developmentalist endeavour of the EPRDF regime. The PSCAP had the ideals of state efficiency, effectiveness, accountability, participation and the promotion of good governance as its objectives. However, the programme's outcome was to

create a politically disciplined and streamlined government system based on a top-down approach and with the principles of upward accountability of the civil service (Feyissa 2011; Vaughan and Rafanell 2012). Bureaucrats in the donor offices who intended to co-opt the EPRDF to implement their agenda ended up being co-opted.

Relative autonomy, particularly from foreign donors, also helped the EPRDF secure meaningful control of the policy-making space. Compared to other African countries that started interacting with foreign development partners after achieving independence, Ethiopia had historical experience dealing with foreign creditors since the 1950s as a sovereign state. Some observers noted that Ethiopians approached their relationship with aid donors 'as a meeting of equals' (Furtado and Smith 2009). Being the only African country that defeated European colonisation was also often referred to in flagging the 'sovereignty card' and keeping foreign actors at bay in critical policy decisions (Furtado and Smith 2009; Feyissa 2011; Vaughan and Rafanell 2012; Lavers 2019).

The EPRDF's developmentalist orientation contradicted the mainstream policy prescriptions of almost every Western donor, further augmenting the EPRDF's assertiveness in aid negotiations. On some occasions, donors were kept uninformed of key policy decisions despite their massive financial support to the government (Lavers 2019). In other contexts, the EPRDF regime remained resilient and adaptive to Western donors' punitive measures, especially regarding the poor human rights record of the regime (examples include the refusal to provide direct budget support after the 2005 elections and the negative publicity for the draconian laws on press freedom and CSOs) (Feyissa 2011).

However, the EPRDF's effort to remain relatively autonomous had some severe limitations. Corrupt behaviour and practices among local business actors, leaders of state-owned enterprises (SOEs) and state officials and bureaucrats significantly compromised the autonomy and legitimacy of the developmentalist regime. Embezzlement, corruption and nepotism in vital SOEs, such as the MetEC and the Ethiopian Sugar Corporation, are the most practical examples (Gebremariam *et al.* forthcoming; Gebregziabher 2019). EPRDF-affiliated business elites had easy access to loans with minimum due diligence from the government's policy bank, the DBE. The money mobilised from private banks was made available to DBE to finance various governmental and private sector-initiated projects. However, the mismanagement of resources within the bank resulted in a high ratio of non-performing loans—almost 40 per cent in 2018 (Yewondwossen 2018; Weis 2020). Similar to the *chaebols*

in South Korea, the EPRDF attempted to establish a sizeable industrial conglomerate (Kim 1993; Underhill and Zhang 2005) through MetEC. However, corruption, nepotism and mismanagement of public resources significantly dwarfed the technological acquisition and innovation that the developmentalist regime aspired to achieve.

There are also two major structural hurdles that the Ethiopian developmentalism experiment failed to overcome. First, on the socioeconomic side, the impressive growth performance was not substantive and robust enough to trigger structural transformation. Second, on the political side, the centralisation of power that developmentalism required directly contradicted the ethnolinguistic-based decentralised federalism that the EPRDF had installed in the 1995 Constitution. This inherent inconsistency later contributed to elite fragmentation because of rivalry between ethnicised political elites who wanted to remain in control (the TPLF elites) and those who wished to have more dominance proportionate to the ethnolinguistic group they claimed to represent (Amhara National Democratic Movement and Oromo Peoples' Democratic Organisation elites — for the Amhara and the Oromo people respectively).

The failure to achieve structural transformation may be attributed to several factors. These could include: the relatively short period of solid growth performance; the very low base that the economy started from, requiring a longer time frame; the rapid population growth; limited access to land, failure to fasten the transfer of surplus rural labour to the manufacturing sector; and exogenous factors such as the fall of commodity prices and natural disasters (Lavers 2023). However, policy-related limitations that required decisive government actions include: the limited diversification and dynamism in the economy; the low level of backward and forward linkages between the agriculture and manufacturing sectors; and systematic efforts to enhance productivity in the agriculture sector through the combined use of fertilisers, improved seeds and irrigation schemes. As a result, the increased income in rural households due to economic growth was insufficient to increase manufactured product consumption and release surplus labour to the urban centres (Manyazewal and Shiferaw 2019).

The political structural challenge appears to have been further exacerbated by the developmentalist aspiration and partial success of the EPRDF. Zenawi was right to emphasise the primacy of politics and the vitality of the 'political set-up' in kickstarting the developmental mission. However, inherent contradictions and the structural bottlenecks of post-1991 Ethiopian politics remained too challenging to resolve. The political decision to centralise economic policy-making to pursue a coherent and

effective implementation of developmentalist policies created more tension between the federal government and the political elites that governed the semi-autonomous ethnolinguistic regions. The political processes that enabled the EPRDF to install and pursue a developmentalist orientation created an existential problem of handling the contradictions it nurtured. The developmental success would not have been possible without creating a centralised power executed by the federal government to shape the production, ownership, control and distribution of resources. Meanwhile, the political processes that enabled rapid economic growth and development sharpened political rivalry among ethnicised political elites and caused elite fragmentation, as witnessed in post-2018 Ethiopia.

Finally, the debate on democracy and the possibility of democratic developmentalism is also worth considering, given Mkandawire's argument and the Ethiopian case. The Ethiopian experiment of developmental statism was not an effort to nurture liberal democracy. The EPRDF was an authoritarian regime which curtailed the civil and political rights of citizens and crushed civil society and opposition parties. The consensual and gradual decision-making processes inherent in Western democracy are less compatible with the radical and transformative development the EPRDF sought to achieve. As a result, the Ethiopian model was an 'authoritarian state-led development' (Lavers 2023:298) with a procedural democracy of regular elections.

Conclusion

This article has attempted to answer what the Ethiopian experiment means for Mkandawire's model and what lessons it holds broadly. I specifically focused on the 'ideology–structure nexus', state capacity and autonomy aspects of Mkandawire's theorisation of the African developmental state. I examined the now-defunct Ethiopian ruling party's EPRDF, internal documents and policies. Additional literature served as vital sources for evaluating the Ethiopian experiment's successes and limitations. The Ethiopian case defied the notion that African leaders have limited ideological commitment to transformational development. The revolutionary democracy ideology that informed the developmental statism in Ethiopia contributed to envisioning a strong state built on the long history of state-making in Ethiopia.

The two policies examined in this article, the rural development policy and the execution capacity-building policy, demonstrate the aspiration of the EPRDF to build a self-reliant economy, achieve structural transformation and realise a state machinery that responds to the developmental challenges on the ground. To this end, the EPRDF rejected the technocratic notion

of capacity-building and approached it instead as a political project to transform social relations where the interplay between government, the public and the private sector was redesigned to make the government a critical development leader.

The EPRDF's approach to institution-building was also an antidote to the 'institutional monocropping' and 'monotasking' orientation that Western donors prescribed within the good governance package. The party concentrated on fashioning context-specific developmental institutions rather than copying Western-style institutions that focused on restraining the state. This helped the EPRDF to invest heavily in pro-poor sectors (education, health, roads, energy and agriculture), which substantively changed the lives of millions of people.

However, the Ethiopian experiment was not without limitations. The political set-up of pursuing developmentalism was authoritarian. Furthermore, the inherent contradiction between the post-1991 federal arrangement of political institutions based on sociocultural and linguistic identities and the centralisation of power to pursue developmentalism created a debilitating internal fracture within the ruling party. The large-scale corruption and mismanagement of state resources within state institutions, especially during the post-Zenawi period, also tainted the image of the Ethiopian experiment.

Notes

1. See Mkandawire (2007) for a critical reflection on how African intellectuals conceived the relationship between development, democracy and social inclusion in their call for good governance. This was a completely different understanding of the 'good governance agenda' pursued by the World Bank.
2. The entire education sector is thoroughly explored, from primary, secondary, technical and vocational to higher education. The section diagnoses each cycle of the education sector, the intended policy interventions, the rationale for building diverse human capital and its link with the broader development orientation.
3. Neoliberalism promotes extremely limited state intervention within the socioeconomic sphere. Therefore, the ideal type of state is a night-watchman state that avoids intervening in economic processes. The rational decision-making actors of the market will be engaged only in rent-creation activities rather than rent-seeking. According to the neoliberal paradigm, efficient resource allocation and accelerated economic growth can be optimised only under a night-watchman state (see Mkandawire 2001; Zenawi 2012).

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An Analysis of Costs Associated with Maize Storage Facilities Used by Rural Smallholder Farmers in Uganda

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Abstract

This article assessed the acquisition, maintenance and storage costs associated with different types of storage facilities used by smallholder maize farmers in Uganda, applying cost-based descriptive analysis. These costs influenced the farmers' decisions about the type of storage facility to use. Poor storage exacerbates losses that result from pests, rats and rot. The findings show that the high costs of acquiring storage and maintenance precluded smallholder maize farmers from accessing good storage. For policy purposes, more investment needs to be directed towards acquiring safe storage to reduce exposure to risk and protect smallholder farmers from food and income insecurity. This article serves to illuminate the storage challenges at the household level to increase food and income security and assuage poverty. The study's conclusion on the analysis of storage is indicative only. Further research that includes a representative number of storage facilities per storage type needs to be carried out, including a cost-benefit analysis.

Keywords: storage; cost; maize; rural smallholder farmers; storage type; Uganda

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Résumé

Cet article évalue les coûts d'acquisition, d'entretien et de stockage associés aux différents types d'installations de stockage utilisées par les petits exploitants de maïs en Ouganda, en appliquant une analyse descriptive basée sur les coûts. Ces coûts ont influencé les décisions des agriculteurs quant au type d'installation de stockage à utiliser. Un mauvais stockage accentue les pertes causées par les ravageurs, les rats et la pourriture. Les résultats montrent que les coûts élevés d'acquisition et d'entretien des installations de stockage ont empêché les petits exploitants de maïs d'accéder à de bonnes installations de stockage. D'un point de vue politique, il faudrait investir davantage pour acquérir des entrepôts sûrs afin de réduire l'exposition au risque et de protéger les petits exploitants de l'insécurité des revenus et de l'alimentation. Cet article permet démontrer clairement les difficultés liées au stockage au niveau des ménages afin d'accroître la sécurité alimentaire et des revenus et de réduire la pauvreté. La conclusion de l'étude sur l'analyse du stockage n'est qu'indicative. Des recherches plus poussées sont nécessaires avec un nombre de magasins représentatifs par type de stockage ainsi qu'une analyse coût-bénéfice.

Mots-clés : stockage ; coût ; maïs ; petits exploitants ruraux ; type de stockage ; Ouganda

Introduction

Although ending hunger is a sustainable development goal, this goal may not be achieved, if high food losses through poor storage at the household level are not prevented. The world population is projected to reach 9.1 billion by the end of the year 2050 and this will require an increase in food production by 70 per cent (Hodges, Buzby & Bennett 2011; Yusuf & He 2011). The population of Uganda is predicted to grow from 44 million to 99 million people by 2050 (UN 2019). Since the population is highly dependent on agriculture, this will lead to the increased exploitation of natural resources. Therefore, this study argues for reducing food losses wherever possible, including through storage. Although grain storage plays an important role in stabilising food supply across all seasons, its costs remain a challenge that is not adequately addressed by agricultural scientists. Thus, storage difficulties have continued to undermine food and income security among rural smallholder maize farmers in most developing countries (D'Amour *et al.* 2016).

In most developing countries, three out of four people live in rural areas and derive a livelihood from agriculture (Yusuf & He 2011). According to Gitonga, De Groote and Tefera (2015), in East and Southern Africa,

two-thirds of the population live in rural areas where they make a living from agriculture. In sub-Saharan Africa (SSA), agriculture is estimated to contribute about 34 per cent of the gross domestic product (GDP) and employs more than 60 per cent of the active labour force (Amare & Shiferaw 2017). In Uganda, agriculture contributes about 25 per cent of GDP, accounts for 47 per cent of exports and provides employment to more than 72 per cent of the economically active population (Wanyama 2016).

Despite the significant contribution from agriculture, 70 per cent of people living in rural areas live in extreme poverty and hunger (Ndegwa *et al.* 2016). Thus, in developing countries, agriculture is referred to as 'green gold' because of its immense contribution to human life (Mendoza *et al.* 2017). However, due to limited resources, rural smallholder farmers tend to employ rudimentary techniques in their farming system, which cripples the effort to earn much from agriculture (Wanyama 2016). Cereals are known to play a significant role in the livelihood of rural smallholder farmers, with maize being one of the most important for millions of rural farmers in SSA in terms of food and income security (Midega *et al.* 2016). It is the third most widely grown crop globally after wheat and rice (Suleiman *et al.* 2013). More than half of the maize produced is consumed in rural areas where most households have limited economic resources (Tanumihardjo *et al.* 2019).

Although agriculture is the mainstay of many SSA economies, many rural smallholder maize farmers in the region face substantial obstacles that jeopardise their food and income security partly due to post-harvest losses (Yusuf & He 2011; Chuma, Mudhara & Govereh 2020). An important challenge faced by rural smallholder maize farmers is the use of traditional storage facilities made of locally available materials like grass, wood, cow dung and mud, which cannot guarantee adequate safety for stored grain (Chuma *et al.* 2020; Tefera 2012; Yusuf & He 2011). The problem of inadequate and/or ineffective storage affects not only grain for consumption and sale but also the multiplication of seeds (Yusuf & He 2011). Moreover, once a seed is damaged, its viability will deteriorate (Moshi & Matoju 2017). Post-harvest losses are estimated to be between 14 per cent and 36 per cent of production (Gitonga *et al.* 2013), which considerably reduces the farmers' ability to be food secure and fight poverty (Moshi & Matoju 2017).

This study is interested in the quantitative and qualitative post-harvest loss of grain cereals in the value chain system (Hodges *et al.* 2011), including storage. The loss leads to a measurable reduction in the quality and quantity of grain (Affognon *et al.* 2015). For this study, storage is that part of the value chain that is necessary for maintaining maize at the household level

for food and income security (Yusuf & He 2011; Suleiman, Rosentrater & Bern 2013; Makaza & Mabhegedhe 2016). Williams, Murdock and Baributsa (2017) and Ndegwa *et al.*, (2016) have argued that preventing pest damage during maize storage is pertinent for food and income security among rural smallholder farmers. It also enables them to realise better prices when they sell their maize.

Many scientists have warned that grain losses are reaching alarming proportions (Gitonga *et al.* 2013; Kaminski & Christiaensen 2014). This has culminated in the Food and Agriculture Organization's (FAO) and World Bank's decision to direct 47 per cent of the aid of USD 940 billion towards the post-harvest sector in SSA (Affognon *et al.* 2015), partly to reduce grain losses in SSA and thus alleviate hunger, especially among the rural poor, which is a key objective of the United Nations hunger task force (Ndegwa *et al.* 2016).

Agriculture in Uganda is dominated by smallholder producers, who account for 80 per cent of the farming community (NPA 2013). More than 80 per cent of Uganda's maize is produced by smallholders (Sserumaga *et al.* 2015). It is cultivated by 86 per cent of the 4.2 million agricultural households in the country (Okoboi, Muwanga & Mwebaze 2012). Maize feeds urban and rural poor populations. It also feeds schools, hospitals, the military, prisons and the police. It is also used for animal and poultry feed (Kaaya & Warren 2005). Therefore, the safe storage of maize at the household level is crucial for food and income security and may directly impact poverty alleviation (Gitonga *et al.* 2015; Ndegwa *et al.* 2016). In a bid to reduce maize grain losses, rural smallholder farmers have adopted protection measures like sun-drying, the use of neem tree leaves, cow dung mixed with water, and smoking the maize by hanging it above the fire. However, these methods offer limited protection to the stored grain (Ndegwa *et al.* 2016).

Maize in Uganda is grown under a low-input rain-fed system with two seasons (David *et al.* 2016). It is usually inter-cropped with beans and groundnuts. Since maize is seasonally grown but demanded throughout the year, it requires storage (Tefera 2012). Its seasonal production leads to a fluctuation in supply (Kimenju & De Groote 2010). However, smallholder farmers in many developing countries still use traditional maize storage methods, which are often not successful in preventing losses that are thus a constraint on food and income security (Ndegwa *et al.* 2016; Tefera 2012; Tefera *et al.* 2011). As a result, rural smallholders sell maize immediately after harvest. However, since this is when prices are the lowest, they are consequently disadvantaged (Ndegwa *et al.* 2016). Therefore, effort needs

to be directed towards an even maize supply, which means protecting it through effective storage (Chigoverah & Mvumi 2016).

Losses of maize for smallholder farmers occur at various stages of the value chain: harvesting, preliminary processing, handling, transportation, marketing, and during storage, when pests, spillage, birds, pilferage and rodents eat into the stock (Affognon *et al.* 2015; Abass *et al.* 2014). In SSA, loss from insect pest damage in storage is estimated at 20 per cent (Chigoverah & Mvumi 2016). In East Africa, about 19 per cent of the maize produced is lost in post-harvest storage (Yakubu *et al.* 2016). In Uganda, on-farm post-harvest maize loss is estimated to be about 6 per cent of the quantity harvested (Shee *et al.* 2019). Post-harvest losses resulting from pest attacks in storage are the highest, ranging between 10 per cent and 88 per cent of the maize produced every season (Midega *et al.* 2016).

Because modern storage facilities are too expensive, farmers continue to use traditional storage methods, like granaries, cribs, sacks, the space above the fire, house corners and baskets (Tibaingana, Kele & Makombe 2018). These facilities are susceptible to insect damage, mostly likely because they are not airtight enough to prevent insect damage (Abass *et al.* 2014).

Cost of Storage Associated with Rural Smallholder Maize Farmers

This article assessed the costs associated with storage facilities used by rural smallholder farmers. We classified costs into three broad categories: storage acquisition, maintenance of the storage facility, and maize loss in storage. Storage acquisition costs are incurred when a farmer obtains or constructs a storage facility (Tibaingana *et al.* 2018). They include the cost of materials and labour, when the farmer constructs his/her own storage, and the cost of transport when storage facilities are purchased. Maintenance costs of the storage include chemicals purchased to control pests in storage, the cost of cleaning the storage facility and repairing it before use, and the cost of labour for cleaning and repair. The cost of the loss of maize in storage is calculated in the value of the maize lost, as a result of pests, rats, rodents and rot, among other factors.

Besides damaging the maize, rodents also damage storage facilities like sacks, baskets and granaries. The hermetic bags that were found to be more effective than pesticides in protecting the stored maize are expensive for rural smallholder maize farmers (Ndegwa *et al.* 2016). Inadequate storage used by farmers results in two major consequences. First, farmers have to sell maize at low prices immediately after harvest to avoid losses and, second, they have to buy maize later for consumption when they run out of stock for consumption (Abass *et al.* 2014).

Research Objective

An empirical, comparative assessment of the costs of storage in different facilities for rural smallholder maize farmers is not available generally, nor specifically for Uganda. Consequently, there is limited literature with detailed cost analysis of storage facilities generally in developing countries (Kadjo, Ricker-Gilbert & Alexander 2016; Ndegwa *et al.* 2016; Abass *et al.* 2014). The central objective of this study, therefore, is to analyse the different costs incurred by rural smallholder farmers for different storage facilities.

Data Collection

Data was collected during a survey conducted between January and May 2016 in Eastern Uganda. Eastern Uganda was purposively selected for the study because it is the country's highest maize-producing region, based on the agriculture census of 2008/2009 which indicates that the Eastern region accounted for more than 50 per cent of maize production in 2010. Using the same census we selected the highest and lowest maize-producing districts of Iganga and Katakwi, respectively, and the medium-producing district of Manafwa, where production was closest to the average production of all the districts in the region.

Three sub-counties were selected from each district as follows: the highest maize-producing sub-county, the lowest maize-producing sub-county, and the sub-county with maize production nearest the average of all sub-counties in a district. The census data was not disaggregated to the village level, so extension workers in each sub-county were asked to identify one high-, medium- and low-producing village in each sub-county, resulting in twenty-seven villages. Lists of village households were provided by the local council personnel who are conversant with the people in the respective villages and used as sampling frames. The extension officer estimated that the population of farmers in the target villages was about 800. According to Israel (1992:3), a statistically representative sample for such a population, with a precision of 5 per cent, is 267. Therefore, the SPSS random number generator was used to select ten farmers from each of the twenty-seven villages, resulting in a sample of 270 respondents.

For the acquisition costs of storage types, data was collected from farmers' recall. If it was constructed, the value of the labour and the costs of the materials were used to estimate costs, even if local materials were used. For the cost of maintaining the storage, farmers were asked to estimate, from memory, the cost of purchasing chemicals to control pests

in the facility. For the loss of grain during storage, farmers were asked to estimate seasonal maize loss in kilogrammes. The average price of maize realised by farmers who used a specific storage type was used to convert the maize lost in storage to monetary value. The sum of these three costs constituted the costs of storage.

In studying the storage costs, we discovered that storage costs could be further disaggregated, for instance, to include the costs of carrying maize in and out of a storage facility. We missed this level of disaggregation and probably missed this cost unless it was inadvertently included in one of the broad categories we used, which is unlikely.

Results and Discussion

Household Characteristics

Fifty-six per cent of the sample household heads were male, with an average age of 43 years. On average, male households and heads had eight years of formal education. The average female household head's age was 40 years with an average of six years of formal education. The average number of people in the household was six which did not vary by gender of the household head. Almost all respondents who stored maize incurred storage losses, although with some storage facilities, the losses were lower than with others. Farmers used eight different storage facilities: sacks (83 %), granaries (12 %), house corners (19 %) open cribs (3 %), closed cribs (4 %), house roofs (2 %), baskets (6 %) and above the fire (0.7 %). These storage types stored both shelled and unshelled maize. Sacks, baskets and house corners stored mainly shelled maize, whereas other storage facilities such as granaries stored shelled and unshelled maize. Therefore, in assessing the cost of storage, farmers were asked to estimate the loss of maize in storage for shelled and unshelled maize separately. The unshelled was then converted to a shelled equivalent. The average storage length was three months across the sampled districts. Pictures of some of the storage types can be seen in Tibaingana *et al.* (2018). Although pots were mentioned as a storage facility, none of the respondents were using them because they were reported to be very fragile and usually used to store seeds for planting the next season. In addition, although jerrycans were mentioned as a storage type by the respondents, no one was found using this type of storage during the period of study.

Farmers used one or a combination of storage facilities, sometimes in sequence – for example, the house roof for temporary storage and a sack and/or closed crib for more permanent storage. Seventy-five per cent of the respondents used one storage facility, 23 per cent used two, 2 per cent

used three and 1 per cent used four storage facilities. This distribution is similar in Manafwa and Katakwi, the medium- and low maize-producing districts, but in Iganga, the highest maize-producing region, 71 per cent of the respondents used one storage facility (mostly sacks) whereas 21 per cent used two storage facilities.

Table 1 shows that of the eight different storage types used by the respondents, sacks were the most common. Farmers reported that this was because they were cheap to acquire and were readily available. In addition, shelled maize can be carried easily in sacks for drying in the sun, and one can tell how much maize there is in storage by counting the number of sacks. House corners were the next most common storage type, followed by granaries, baskets and cribs, respectively.

Table 1: Prevalence of the use of storage types in Iganga, Manafwa and Katakwi districts (n=270)

Storage Type	Number	District (%)		
		Iganga (High) N=90	Manafwa (Medium) N=90	Katakwi (Low) N=90
Sacks	224	93	89	67
House corner	52	31	17	10
Granary	33	0	9	28
Basket	16	0	7	11
Crib (closed)	10	0	3	8
Crib (open)	7	0	0	8
House roof	6	4	1	1
Above-the-fire	2	0	0	2
Total number of storage types	350	116	113	121

Source: Authors' fieldwork

Although the respondents numbered 270, the number of storage types shown in Table 1 is 350 because some farmers used more than one storage type. Table 1 shows that in the high maize-producing district only three storage facilities were used – sacks, house corners and house roofs. Farmers explained that they used the house roof least because it is a transitional (temporal) storage space. Most farmers explained that it was very difficult to protect maize on the house roof from damage, especially from birds

(domestic and wild). In the medium maize-producing district six storage facilities were used and farmers in the low maize-producing district used all the eight storage types.

Table 2 shows the estimates of the quantities of maize stored in each storage type by the farmers who used that facility as the main storage. On average the highest quantity of maize was stored in the closed crib, which stored more than 2,000 kg of maize. The lowest quantity of unshelled maize was stored above the fire, averaging about 2 kg. This is consistent with the fact that the space above the fire is used to store maize for seed that farmers recycle.

Table 2: Estimate of the amount of maize stored per district (kg)

SN	Storage Type	Estimated Amount of Maize Lost (Kg)			
		Total (n=270)	Iganga (n=90)	Manafwa (n=90)	Katakwi (n=90)
1	Above the fire (n=1)	2	N/A	N/A	2
2	House roof (n=2)	51 (49)	2	N/A	100
3	House corner (n=24)	1,408 (824)	682 (190)	2,669 (1957)	194 (65)
4	Sacks (n=201)	539 (80)	662 (188)	562 (58)	317 (75)
5	Basket (n=1)	20	N/A	N/A	20
6	Granary (n=29)	480 (141)	N/A	894 (468)	322 (70)
7	Crib (open) (n=6)	263 (152)	N/A	N/A	263 (152)
8	Crib (closed) (n=6)	2033 (790)	N/A	3267 (1,157)	800 (513)

Note: Standard deviations reported in brackets

Source: Authors' fieldwork

Table 2 shows the estimated amount of maize stored in kilogrammes per district in relation to the total. Some variation is due to the size of the storage facility, which differed across districts; however, some variation is due to the way farmers use the different storage facilities. For instance, farmers tend to fill the sacks to different levels although there is a standard sack size. There is no standard deviation for the basket because only one farmer used the basket as the main storage type.

Three storage spaces warrant special discussion, namely, above the fire, the house roof and the house corner. The house corner and house roof were sometimes used as transitory (temporal) storage facilities. Many farmers used these storage spaces in lieu of other more permanent storage types. Therefore, the stored quantities varied and were not easy to estimate for those farmers who used these storage types as transitory (temporal) facilities.

The space above the fire was used by very few farmers. For these reasons, we compare the quantities of maize stored in the other storage facilities and not the house corner, the house roof or above the fire.

The results of the comparison of the quantity of maize stored in the other five storage types (types 4 to 8), ANOVA ($F=1.74$; $F \text{ Prob} = 0.0991 > 0.05$), show that there is no statistically significant difference in the quantity stored in each storage type. However, we would like to note a caveat in the interpretation of the statistical analyses. We could not estimate the prevalence of the storage types used by farmers a priori. In this regard, our study is therefore explanatory in that it established the types of storage facilities used by rural smallholder maize farmers in Uganda and their prevalence. We are aware that the statistical comparison of the amounts of maize stored by each storage type requires that there be statistical representation in each category of the storage facility. For instance, there are only seven open cribs in our sample, compared to 224 sacks. This means that the amount stored in the sacks is better represented and therefore most likely would give a better estimate than that of open cribs. This may be the source of the failure to observe the differences in the quantities stored by different storage facilities. We therefore note that these results are indicative only and recommend that the quantities stored be studied using statistically representative samples of all the storage facilities. This caveat applies to most of the statistical analyses performed in this study.

Table 3 shows that gender plays a role in the use of the different storage facilities. The p-value of the chi-square for the association between gender and storage type is 0.0200 (< 0.05) showing a significant association. Baskets were used by women only, whereas only men used closed cribs and the space above the fire. This is probably a function of both the effectiveness and cost of the storage types. The baskets are cheaper and more accessible but less effective, and therefore the men, who tend to have more access to resources, do not use them. Seventy-six per cent of the granaries were used by males and 67 per cent of the house corners were used by females. Farmers explained that the high use of the house corner storage by female farmers was due to security. Respondents reported that maize kept in the house corner would not be stolen easily compared to maize stored outside the house in granaries or cribs. Women, therefore, tended to use the house corner as more permanent storage than males who used it as transitory (temporal) storage. Some of the storage types were gender-insensitive. For instance, 50 per cent of the open cribs were used by female farmers.

Table 3: Storage type used by gender

Storage Type Used	Gender (%)	
	Male	Female
Sacks (n=224)	55	45
House corner (n=52)	33	67
Granary (n=33)	76	24
Basket (n=16)	0	100
Crib (closed) (n=10)	100	0
Crib (open) (n=7)	50	50
House roof (n=6)	50	50
Above the fire (n=2)	100	0
Chi-square = 16.6011; p-value = 0.0200		

Sources: Authors' fieldwork

Analysis of Storage Costs by Storage Type

The analysis of the three broad categories of costs estimated in this study follows.

Cost of acquisition by storage type

Table 4 summarises the results of the cost of acquisition by storage type and district. The cost of acquisition was zero for the above-the-fire space because in this the maize is hung above the cooking place. The basket storage had a lower cost of acquisition compared to closed cribs and sacks. This is because it is a transitory storage facility and is locally made from inexpensive materials like reeds collected from river banks. The most expensive storage facility to acquire is the closed crib. It is quite big and made of materials that are mainly purchased. In most cases, it is constructed by experts.

Table 4 also shows that the lowest acquisition costs were experienced in Iganga, the highest maize-producing district. Although this is an area of further research, we think that the differences between areas are a function of the availability of local materials for constructing storage facilities. Acquisition costs are the first hurdle that farmers face in choosing the type of storage facility they might want to use. Table 4 estimates the extent of this hurdle. We realise and acknowledge the complexity of estimating the acquisition costs for the first three storage facilities, namely, above the fire, the house roof and the house corner. We acknowledge that, for instance, the acquisition costs of a house corner can be better estimated by considering the cost of constructing the house, the lifespan of the house and then apportioning an

area-proportionate cost to the annual depreciation of the house. However, we also note that the premise of this study is that the improvement of storage facilities used by rural smallholder maize producers should start by considering the existing storage methods used by farmers. In this regard, we acknowledge that the first three storage facilities would not form part of such a maize storage improvement programme because, whereas it may be possible to reduce acquisition costs by finding innovative ways of constructing a crib, a house corner does not offer a similar opportunity. Thus, although there is no benefit to attempting a reasonably accurate estimate of the acquisition costs of the first three storage facilities, we do provide an indicative estimate.

Table 4: Average acquisition costs by storage type and district (UGX)

SN	Storage Type	Mean Acquisition Cost (Ugx)			
		Total	Iganga	Manafwa	Katakwi
1	Above the fire (n=2)	0 (0)	N/A	N/A	0 (0)
2	House roof (n=6)	325,000 (388,908)	600,000 (0)	N/A	50,000 (0)
3	House corner (n=52)	295,925 (183,360)	272,222 (44,962.3)	300,220 (74,437)	330,000 (76,811)
4	Sacks (n=224)	3,214 (21,180)	5,494 (3,740.7)	1,487 (146)	2,000 (427)
5	Basket (n=16)	12,000 (0)	N/A	N/A	12,000 (0)
6	Granary (n=33)	74,283 (66,842)	N/A	61,250 (12,843)	79,248 (16,474)
7	Crib (open) (n=7)	558,333 (269,103)	N/A	N/A	558,333 (109,861)
8	Crib (closed) (n=10)	1,333,333 (1,046,263)	N/A	2,166,667 (440,958)	500,000 (152,752)
Total (Mean n=350)		81,165 (274,087)	38,772 (112,582.3)	112,164 (418,091)	92,558 (191,481)

Note: Standard deviations reported in brackets

Exchange rate: USD 1 = UGX 3,300 at the time of the survey

Source: Authors' fieldwork

Using the total sample of farmers (that is, not disaggregated by district) who used the storage types 4 to 8 in Table 4 we conducted an analysis of variance in the costs of acquisition. The results ($F=71.02$: $F \text{ Prob}=0.0000 < 0.05$) show that the differences in acquisition costs are statistically significant. Even though we leave out the house corner in the ANOVA, we note that it

was extensively used by women. This gives reason for concern that a storage improvement programme that excludes the house corner would leave out women. The fact that some women prefer this storage space because of safety concerns indicates the urgency of the need to develop effective storage for rural smallholder maize farmers which is also accessible to women.

Maintenance cost by storage type

Table 5 shows that the resultant sample of storage facilities is 350 because some farmers used more than one storage type. The cost of maintenance was zero in the above-fire storage space. It was reported that above-fire storage kept maize for a long time (three to five months) without damage. This was as a result of the smoke produced from daily cooking. However, the drawback of this storage type is that it is viable for small quantities only. Besides, the stored maize turns brown from the smoke. Hence, it is ideal for seed storage as opposed to consumption. Basket storage had higher maintenance costs compared to closed cribs and sacks. The cost of maintenance of the crib was lower than that of the granary and yet the crib stored more maize compared to the granary. The cost of maintaining stored maize was cheaper in open cribs (at UGX 6,000) and sacks (at UGX 7,625). Farmers who stored maize in closed cribs, baskets, granaries and house corners spent, on average, UGX 9,883, UGX 10,000, UGX 12,614 and UGX 13,825 respectively on maintenance.

Table 5: Average maintenance costs by district by storage type

SN	STORAGE TYPE	Mean Maintenance Cost (IN UGX)			
		Total (n=270)	Iganga (n=90)	Manafwa (n=90)	Katakwi (n=90)
1	Above-the-fire (n=2)	0 (0)	N/A	N/A	0 (0)
2	House roof (n=6)	0 (0)	0 (0)	N/A	0 (0)
3	House corner (n=52)	13,825 (22,033)	14,911 (10,829)	15,960 (5,160)	7,600 (1,939)
4	Sacks (n=224)	7,625 (13,038)	5,750 (970)	11,912 (2,251)	4819.2 (932)
5	Basket (n=16)	10,000 (0)	N/A	N/A	10,000 (0)
6	Granary (n=33)	12,614 (18,271)	N/A	8,538 (3,193)	14166.7 (4,523)
7	Crib (open) (n=7)	6,000 (2,607)	N/A	N/A	6,000 (1,064)
8	Crib (closed) (n=10)	9,883 (5,782.9)	N/A	12,500 (4,330)	7266.7 (1,507)
Total (Mean) (n=350)		8,650 (14,467)	6,602 (13,032)	12,082 (17,455)	7,266 (11,830)

Note: Standard deviations reported in brackets

Exchange rate: USD 1 = UGX 3,300 at the time of survey

Source: Authors' fieldwork

The results indicate that, on average, maintenance costs were higher for female-headed households. Remarkably, even when female rural smallholder maize farmers used the same storage type as men, they were reported to incur higher costs of maintenance. This is probably because women, being the ones responsible for feeding the family, have a higher appreciation of the need to preserve food and therefore may use more chemicals than men, thus incurring more costs. However, this is an area of further research. Following the same logic as presented for the acquisition costs, we compared the maintenance costs for storage facilities 4 to 8. The results of the ANOVA ($F=1.09$; $F \text{ Prob}=0.3726>0.05$) show that there is no significant difference in the mean maintenance costs for the storage types.

We note that the absence of difference may be due to the fact that we need to compare maintenance costs per kilogramme of stored maize. In Table 6, we calculate the maintenance cost per kilogramme stored by storage type and district.

Table 6: Average maintenance cost per kg by district and storage type

SN	Storage Type	Mean Maintenance Cost Per Amount of Kg Stored (UGX)			
		Total (n=270)	Iganga (n=90)	Manafwa (n=90)	Katakwi (n=90)
1	Above the fire (n=2)	0 (0)	N/A	N/A	0 (0)
2	House roof (n=6)	0 (0)	0 (0)	N/A	0 (0)
3	House corner (n=52)	56 (106)	34 (18)	36 (15)	136 (93)
4	Sacks (n=224)	28 (55)	19 (3)	36 (9)	28 (7)
5	Basket (n=16)	500 (0)	N/A	N/A	500 (0)
6	Granary (n=33)	106 (283)	N/A	22 (12)	139 (72)
7	Crib (open) (n=7)	90 (94)	N/A	N/A	90 (3)
8	Crib (closed) (n=10)	16 (18)	N/A	8 (6)	24 (13)
Total (Mean) (n=350)		41 (115)	21 (34)	34 (70)	69 (181)

Note: Standard deviations reported in brackets

Source: Authors' fieldwork

Table 6 shows that the highest maintenance cost per kilogramme was experienced by the farmers who used the basket, whereas the lowest cost was attributed to the above-the-fire and house roof storage spaces, largely because these require little maintenance.

Further analysis of the storage types 4 to 8 ($F=4.74$; $F \text{ Prob}=0.0000<0.05$) shows that there is a statistically significant difference between the means of the maintenance costs per kilogramme of stored maize by storage type.

This result begins to indicate the storage types that could be focused on in the early stages of a maize-storage improvement programme. The apparent low maintenance costs of the sacks and closed crib certainly make these methods attractive.

Cost of maize lost in storage

The losses in storage were estimated in kilogramme for each storage facility. Table 7 summarises the loss in storage in kilogramme by storage type.

Table 7: Estimated maize loss by storage type (kg)

SN	Storage Type	Estimated Loss in Storage (Kg)
1	Above the fire (n=2)	0.5(0)
2	House roof (n=6)	28 (24)
3	House corner (n=52)	64 (21.2)
4	Sacks (n=224)	43 (3.4)
5	Basket (n=16)	20 (0)
6	Granary (n=33)	34 (5.6)
7	Crib (open) (n=7)	28 (6.2)
8	Crib (closed) (n=10)	45 (12.3)
Overall mean = 43 (53.6)		

Note: Standard deviations reported in brackets

Source: Authors' fieldwork

The major causes of maize loss during storage were pests, birds (domestic and wild), rot, pilferage and rats. The loss appeared highest for farmers who stored maize in baskets (20 kg) and house corners (64 kg). Farmers explained that this is because these storage facilities are open which makes it difficult to protect the stored maize from damage. The above-the-fire storage space had the lowest loss (0.5kg). The average maize lost across storage types was 43 kilogrammes. Table 6 tests for the differences in the means for the storage types that could be included in a maize-storage improvement programme.

We converted the losses in storage in Table 7 to losses per kilogramme of stored maize. To facilitate a better comparison, the losses (in kg) were converted into losses per amount of maize stored in a given storage type and expressed as a percentage by multiplying it by 100. Table 8 shows the results of the percentage losses by storage type and district.

Table 8: Amount of maize lost in storage per kilogramme of maize stored (%)

SN	Storage Type	Total	Iganga	Manafwa	Katakwi
1	Above the fire (n=2)	25	N/A	N/A	25
2	House corner (n=52)	18	13	13	38
3	House roof (n=2)	3	2	N/A	4
4	Sacks (n=224)	16	16	132	20
5	Basket (n=16)	100	N/A	N/A	100
6	Granary (n=33)	20	N/A	13	22
7	Crib (open) (n=7)	37	N/A	N/A	37
8	8 Crib (closed) (n=10)	19	N/A	1	38
Total (n=350)		17	16	13	24

Source: Authors' fieldwork

The highest percentage loss of stored maize was experienced in Katakwi, the lowest maize-producing area, and the lowest was in Manafwa, the medium maize-producing area. Whether maize losses in storage are truly a function of location needs to be investigated and the causes identified. On average, basket use lost the most maize, close to 100 per cent. The lowest percentage loss was on the house roof. This may be due to the fact that farmers do not store maize on the roof for long periods of time. In Manafwa, the closed crib lost almost no maize whereas in Katakwi the closed crib loss was much higher. The low loss in the closed crib in Manafwa makes this method a good candidate for a maize-storage improvement programme; the causes of the high loss in Katakwi warrant further investigation. We performed ANOVA to test whether there are statistically significant differences in the percentage losses in storage between the storage types 4 to 8. The results ($F=3.22$; $F \text{ Prob}=0.0027 < 0.05$) show that there is a statistically significant difference in the percentage losses from the different storage types.

Because we were interested in the monetary value of storage losses, we converted the estimated losses in Table 7 to monetary loss by using a price factor. Table 9 shows the price factors used to convert the losses per kilogramme to a monetary value.

The average price was calculated from the maize that was sold from each storage type. However, because there were price variations resulting from storage type and season, it is recommended that these should be investigated in the future. The highest price was achieved by the closed crib and the lowest was achieved by the house roof. It is important to note that the price is a function not only of the extent to which the storage type protects the

maize but also the time of sale. In order to properly compare the prices based on the extent to which the storage types protect the maize, the prices of the maize sold from each storage type should be compared against sales from similar time periods. Table 10 shows the results of calculating the losses in storage in Table 7 per storage type and district.

Table 9: Price factors by storage type (UGX/kg)

SN	Storage Type	Estimated Ugx/Kg Loss
1	Above the fire (n=2)	634
2	House roof (n=6)	547
3	House corner (n=52)	692
4	Sacks (n=224)	758
5	Basket (n=16)	863
6	Granary (n=33)	677
7	Crib (open) (n=7)	700
8	Crib (closed) (n=10)	950
Overall mean=715 (294)		

Source: Authors' fieldwork

Table 10: Amount of maize lost in storage converted to monetary loss (UGX)

SN	Storage Type	Monetary Value Lost (Ugx)			
		Total	Iganga	Manafwa	Katakwi
1	Above the fire (n=2)	317 (0)	N/A	N/A	317 (0)
2	House corner (n=52)	44,973 (74,751)	18,127 (4,095)	76,212 (34,697)	30,817 (9,266)
3	House roof (n=2)	15,306 (18,065)	28,080 (0)	N/A	2,532 (0)
4	Sacks (n=224)	33,338 (48,104)	28,032 (3125)	33,815 (5,118)	40,865 (10,145)
5	Basket (n=16)	57,821 (0)	N/A	N/A	57,821 (0)
6	Granary (n=33)	23,026 (18,698)	N/A	24,449 (6,733)	22,484 (4,149)
7	Crib (open) (n=7)	20,300 (14,247)	N/A	N/A	20,300 (5,816)
8	Crib (closed) (n=10)	44,657 (37,922)	N/A	17,333 (3,333)	71,980 (20,993)
Total (n=350)		33,061 (48,012)	27,042 (26,759)	37,144 (53,249)	34,996 (57,952)

In order to facilitate a better comparison, the losses in storage in Table 10 were divided by the quantity stored in each storage facility to get the UGX loss per kilogramme of stored maize. The results are summarised in Table 11.

Table 11: Amount of maize lost in storage per kilogramme of maize stored

SN	STORAGE TYPE	Monetary Value Lost (UGX/KG)			
		Total	Iganga	Manafwa	Katakwi
1	Above the fire (n=2)	0.25 (0)	N/A	N/A	0.25 (0)
2	House corner (n=52)	0.18 (0.23)	0.13 (0.052)	0.13 (0.045)	0.38 (0.174)
3	House roof (n=2)	0.03 (0.014)	0.02 (0)	N/A	0.04 (0)
4	Sacks(n=224)	0.16 (0.20)	0.16 (0.023)	0.132 (0.020)	0.20 (0.031)
5	Basket (n=16)	1 (0)	N/A	N/A	1 (0)
6	Granary (n=33)	0.20 (0.222)	N/A	0.13 (0.056)	0.22 (0.052)
7	Crib (open) (n=7)	0.37 (0.381)	N/A	N/A	0.37 (0.156)
8	Crib (closed) (n=10)	0.19 (0.397)	N/A	0.01 (0.005)	0.38 (0.313)
Total (n=350)		0.17 (0.219)	0.16 (0.197)	0.13 (0.160)	0.24 (0.271)

Note: Standard deviations reported in brackets

Source: Authors' fieldwork

In Table 12, further analysis of the storage types 4 to 8 shows ($F=3.22$; $F \text{ Prob}=0.0027 < 0.05$). This means that there is no statistically significant difference between the means of the storage type and loss per kilogramme stored.

Table 12: Analysis of variance in storage and loss per kilogramme stored

SN	Storage Type	Loss Per Kg Stored	Anova
4	Sacks (n=224)	0.16 (0.20)	F-Statistics= 3.22 Prob>F=0.0027
5	Basket (n=16)	1 (0)	
6	Granary (n=33)	0.20 (0.222)	
7	Crib (open) (n=7)	0.37 (0.381)	
8	Crib (closed) (n=10)	0.19 (0.397)	

Conclusion

The maize storage facilities used by rural smallholder farmers have not been adequately described in extant literature. This study contends that any effort to improve maize storage for rural smallholder farmers should start with understanding current rural smallholder maize storage practices. In this regard, the study is exploratory. Even so, there are some observations in the study that could guide a maize-storage improvement programme. The study found that the choice of storage type is gender-sensitive. Therefore, any maize-storage improvement programme needs to take this factor into consideration. It also found that farmers sometimes use multiple storage facilities and sometimes in sequence. The decision process used by farmers in choosing storage facilities used needs to be investigated and better understood. The advantages of using more than one type of storage and the sequence of use need to be analysed further. Of the current storage types, there may be an optimal sequence of use that could be established in a maize-storage improvement programme.

This study identifies three categories of costs of storage: acquisition costs, maintenance costs and the cost of loss in storage. In this categorisation, many storage costs were found that were not necessarily estimated in this study, such as drying, shelling, packing and transporting or loading to storage structures. Acquisition cost seems to be one of the main determinants of maize storage choice, which is predominantly the use of sacks, although there seem to be striking location differences. The ready availability of sacks also seems to be an important determinant of storage choice. Whether the prevalence of the use of sacks is a true reflection of preference for this storage type needs further investigation. This can be understood partially by investigating the factors considered by those rural smallholder farmers who used more than one storage type and their decision processes.

The patterns of storage types used in the different maize-producing areas suggest differences by location, which need further investigation. The results suggest that in the high maize-producing district farmers use fewer storage types (three) than in the low maize-producing districts (eight). Whether this is a function of storage costs needs to be better understood. The quantities stored by each storage type need to be better estimated than from farmer recall (perhaps by using measurement), and the comparison of quantities stored by each storage type needs to be made using statistically represented samples of the storage types. It should be noted that the study is indicative; therefore a study of each storage type with a representative sample needs to

be carried out to allow more and better comparisons. This study established the prevalence of each storage type but ended up with smaller samples for the least-used storage type. In the proposed study, a cost-benefit analysis could also better inform the constraints faced by farmers in adopting new and/or improved storage methods.

Finally, since this article is exploratory, the results are indicative. It is, however, important that all storage cost be better estimated using measurement. This article provides a solid footing for how such a study could be structured and the important factors to consider, especially the storage types to target.

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Influence of Socioeconomic Activities on House Form and Settlement Patterns Among the Tiv People of Central Nigeria

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Abstract

The formation of housing and settlement patterns, such as shape, space enclosure and organisation, are influenced by physical, social and economic factors. However, Rapaport found that sociocultural factors are the primary determinants of built form. This view has been challenged, justifying a replication of the study in other built environments. This study explores the influence of the socioeconomic occupation of the Tiv people in Nigeria on their housing and settlement patterns. The means-end chain qualitative enquiry was applied during interviews with twenty-four participants to determine the inherent socioeconomic values connecting their occupation to settlement pattern. Their settlements were found to be dispersed, with aggregated joint compounds, creating sufficient space for farming. However, the pattern of dispersion of settlements poses security risks. Therefore, transformative efforts are required to aggregate the settlements to make more land available for mechanised agriculture and to enhance people's safety. More studies are required to reveal the sociocultural values of Nigerian Indigenous housing for sustainable development of their built environments and way of life.

Keywords: housing form; means-end chain; Nigeria; settlement pattern; socioeconomic activities; Tiv people

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Résumé

Les créations de logements et de modèles de peuplement, telles que la structure, la clôture de l'espace et l'organisation, sont influencées par des facteurs physiques, sociaux et économiques. Cependant, Rapoport a constaté que les facteurs socioculturels sont les principaux déterminants de la forme des bâtiments. Ce point de vue a été contesté par la conduite d'une étude dans d'autres espaces bâtis. Cet article explore l'influence de l'occupation socio-économique du peuple Tiv au Nigeria sur ses modèles de logement et d'habitation. L'enquête qualitative sur la chaîne des moyens et des fins a été appliquée lors d'entretiens avec vingt-quatre participants afin de déterminer les valeurs socio-économiques inhérentes qui relient leur occupation à leur mode d'habitat. Les habitations ont été construites de manière dispersée, avec des enceintes communes agrégées, créant ainsi suffisamment d'espace pour l'agriculture. Toutefois, la dispersion des habitations pose des problèmes de sécurité. Par conséquent, des efforts de transformation sont nécessaires pour regrouper les logements afin de mettre plus de terres à la disposition de l'agriculture mécanisée et d'améliorer la sécurité des personnes. De plus amples études sont nécessaires pour révéler les valeurs socioculturelles de l'habitat indigène nigérian en vue d'un développement durable de leur environnement bâti et de leur mode de vie.

Mots-clés : forme d'habitat ; chaîne des moyens et des fins ; Nigeria ; modèle de peuplement ; activités socio-économiques ; peuple Tiv

Introduction

House form and settlement patterns reflect a people's cultural heritage, which has evolved experimentally through time (Jiboye 2014). The limited perception of house form as the plan shape, distinct from its style or elevation (Maina 2013a), has been expanded to include other aspects of the built environment, such as space size, space use, spatial planning, layout and general compound organisation (Adedeji and Amole 2018; Olotuah, Olotuah and Olotuah 2018). Scholars agree that these house-form components develop according to physical (geographical) and sociocultural influences (Aule, Majid, Jusan and Ayoosu 2022; Aule, Majid, and Jusan 2022a).

Rapoport (1969) examined the determinants of house form in the book *House Form and Culture* and concluded that housing and settlements are shaped mainly by various sociocultural factors, such as family size, kinship, identity, values, and gender divides, as well as socioeconomic influences

like resource availability, occupation, craft and technology. Rapoport’s findings, which give a secondary position to physical factors such as climate, topography, location and material availability, as shown in Figure 1, have been questioned by researchers over time. The criticisms are premised on the scope of Rapoport’s study, dependence on secondary sources and stance on spatial and temporal homogeneity (Saad 1991; Sheuya 2007; Vestbro 2013). The debate justifies the need to replicate the study in other community settings to test whether house form factors are also dependent on peoples’ geographical location, historical heritage and other contextual attachments.

Even though house form may vary according to people’s history, culture and living conditions, as postulated by Rapoport’s critics (Maina 2013b; Nguluma 2003; Saad 1991), it is also governed by the human freedom of choice in designing homes to meet growing family needs relating to function and space, among other psychosocial factors. The freedom to choose no doubt inclines towards the sociocultural in-house form influences. The previous studies did not expressly include socioeconomic factors such as age, status, income, education, associations, occupation or employment, giving room for further questioning.

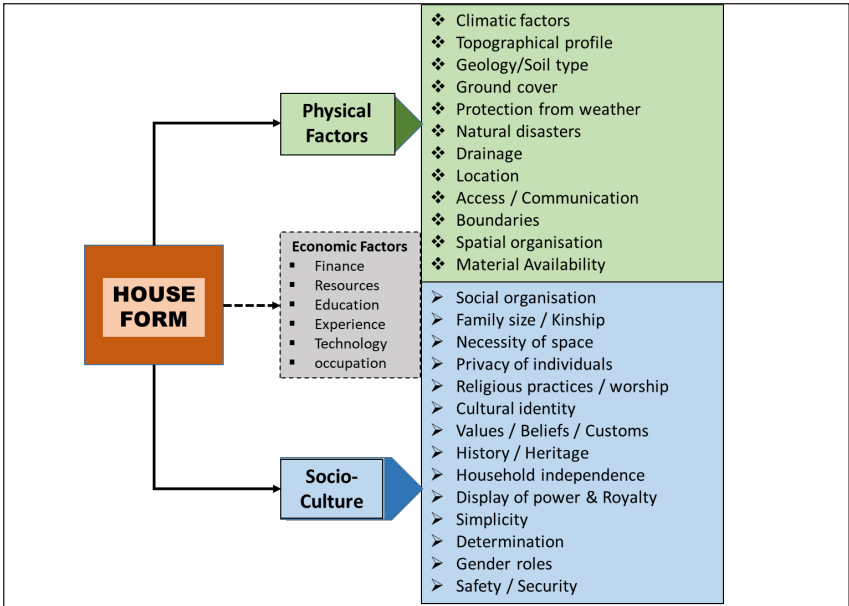


Figure 1: Factors that influence Indigenous housing form
 Source: Adapted from Rapoport (1969), Saad (1991) and Maina (2013b)

The Indigenous built environment of the Tiv people of central Nigeria is based on specific sociocultural values, affected by climate and locally available building materials (Bohannan and Bohannan 2017). Furthermore, Isah and Khan (2016) note that Tiv traditional architecture types share characteristics in their curved house shapes, with few discernible variations in their housing pattern, particularly in aggregating them in compound settings or construction methods. Since the Tiv people predominantly engage in farming, this raises the question of the connection between their house form and agricultural occupation. In addition, Norris *et al.* (2011) and Pavón (2014) assert that since socioeconomic activities influence Indigenous settlements and livelihoods, this needs further exploration, especially in developing societies.

Thus, this study examines the factors influencing house form among the Tiv people of Benue state in central Nigeria. It focuses on socioeconomic influences, such as occupation and activities, family and community settings and the impact of their sociopolitical organisation on the formation of their housing and settlement patterns. Previous studies have attempted to uncover the meanings and values that play out in the formation of housing and the built environment of the Tiv people (Gyuse 1979; Makar 1994; Uji 2021). However, this study uses a systematic approach that elicits the meaning and values through concrete and abstract attributes and functional and psychosocial consequences for the different components of housing: wall shape, materials and finishes; roof shape, framing and cover; and compound and settlement settings. It lays particular emphasis on the compound setting and settlement pattern as these mainly relate to the occupation of farming, define the communal nature of the society and reflect its sociopolitical nature.

Socioeconomic activities of the Tiv people

Though socioeconomic factors generally refer to age, status, income, education, employment, religion, associations and other communal aspects, this study focuses on the people's occupation, family and communal interactions. The Tiv people are among the most populous ethnic groups in Nigeria surpassed only by the Hausa, Yoruba and Igbo. They are the largest ethnic group in Benue State and are regarded as responsible for making the State Nigeria's 'food basket' (Ahua 2019; Gwa 2016; Iorliam 2015). As shown in Figure 2, the people are principally farmers whose staple crops are yams (*Dioscorea* spp.), bulrush millet (*Pennisetum* sp.) and guinea corn

(Sorghum sp.), among other crops (Ahokegh 2014). According to Makar (1994), the leading economy of the Tiv people is agro-business, followed by hunting, fishing, and livestock rearing, as well as secondary domestic industries, such as weaving, smithing and carving.



Figure 2: Images from Tiv Farming Communities

Source: Researchers' Fieldwork

According to Ogundele (2005a, 2005b), the Tiv people regard yam cultivation as their birthright and engage in it with dutiful enthusiasm. In addition to farming, traditional fabric weaving is an important occupation, often seen as a hereditary enterprise, transmitted from one generation to another as a family trade (Gwa 2016; Iorliam 2015). However, their main occupation – farming – is changing rapidly, especially among the younger generation who have attained higher levels of education and choose to work in government and private employment instead.

Communal activities of the Tiv people

The Tiv people live in patrilocal communities composed of extended family members in scattered clusters, though individualism, or living apart, is becoming prevalent among the younger generations. A family system may include more than a thousand people of the same clan living together (Bohannan and Bohannan 2017; Shishima 2019). Thus, the social organisation of the Tiv people is usually communal, manifesting in their unity, mutual dependence and village interrelation.

Throughout the precolonial and early part of colonial times, labour was customarily structured by age grade or *Kwau*, and this determined how people worked, married, and built their compounds (Tughhema 2014). Explaining further, Ogundele (2005a) and Iorliam (2015) note that in traditional Tiv societies, families consist of the elderly, young people of different ages and children subsisting together in large compounds. According to Aboh (2005), they are collective formations of persons who organise themselves for communal labour and other social undertakings to improve their relationships. As conceptualised in Figure 3, the communality presents an excellent occasion for immediate and extended family members to unite and work as a group.



Figure 3: Communal activities among Tiv people

Source: Adapted from fieldwork

In Tiv culture, such practices are conveyed by the principle of Tema Imongo, translated as ‘sitting together’ (Iorliam 2015:26), which binds a community. Furthermore, the unity shown in eating together is extended to farm cultivation in the practice of exchange labour, known as *Ihyumbe*. It is a rotating labour system adopted especially in rural farming areas, directed by fairness, and is synonymous with the saying, ‘If you labour for me today, I labour for you tomorrow’ (Iorliam 2015:44). Given the communal nature of Tiv society, Shija (2018) found that, in the past, few individuals sought to live in isolation.

Traditionally, when a Tiv man comes into wealth, he considers the treasure as belonging to the community or entire kinship group. This worldview was highly valued while individualism was abhorred and considered

divisive, capable of causing disaffection among kith and kin (Anjov 2013; Shishima 2019; Tughhembra 2014). Therefore, people were always helping one another by marrying a member of an age grade, assisting with farm work, or disciplining children, for example. Nevertheless, Ukuma (2015) notes instances where individualism rears its head; when a man becomes wealthy and throws a lavish celebration, he enjoys the individual pride of accomplishment. Even so, it is shared among peers and could be seen as a challenge to peers to put in more effort to attain similar rewards.

Festivals are feasts or merry-making events that are celebrated by an individual, a group, or an entire community (Onaji 2013; Shija 2018). According to Ukuma (2015), festivals could be secular, like sports, or purely religious, like the Easter festival. Religious and secular elements come together in festive celebrations and are regularly observed. Onaji (2013) notes that traditional festivals on the continent generally offer avenues for socialisation, which engenders a strong communal spirit. They are also opportunities for a community's critical appraisal and reappraisal (Ukuma 2015), ensuring conformity to approved standards of behaviour and social norms and communicating plans for the year ahead. Festivals are effective communal activities that people collectively celebrate within the context of any particular society.

This 'primordial' communality contrasts directly with the present generation of Tiv, who seem to care more about satisfying themselves and immediate family members. The many younger adults who have attained higher educational levels and work in cities, at home and abroad have become more individualistic and see little or no need to feed the whole community. Expanding families due to population growth also results in many communal clashes, all working against communal living as practised by the Tiv ancestors.

The sociopolitical setting of the Tiv people

The construct of 'segmental opposition' was identified as the root social organisation of the Tiv people (Bohannan and Bohannan 2017; Tughhembra 2014). This concept entails greater recognition of close patrilineal relations than distant relatives, forming the foundation for segmentary family and household organisation, the basis for a political system and, ultimately, a settlement pattern. Generally, the social setting of the Tiv people is based on kinship affinity; the people are keenly aware of genealogical relationships, tracing lineage almost exclusively through the male parent (Bohannan

and Bohannan 2017; Torkula 2001; Wegh 1998). Another dimension of traditional Tiv social organisation is that it is egalitarian among males, emphasising fairness, equality and equity, with no royal or ruling houses (Ahua 2019; Shija 2018; Shishima 2019).

According to genealogical studies, Tiv is recognised as the people’s ancestor (although in other accounts, it is traced to Takuruku, Anyamazenga, Karagbe, Shon, Gbe, Akem or Awange), who is said to be the father of all Tiv descendants (Shishima 2018). Irrespective of whoever the original ancestor was, the lineage of the ethnic group centres on two of his offspring – Ichongo and Ipusu (Iorliam 2015; Makar 1994; Shishima 2018). These two sons of Tiv gave rise to six intermediate clans, based on agnatic lineage, namely Jerchira, Jemgbagh, Kwande, Lobi, Gwer and Sankera, which occupy fourteen local government councils in Benue state (Gwa 2016; Tughhembra 2014) as presented in Figure 4.

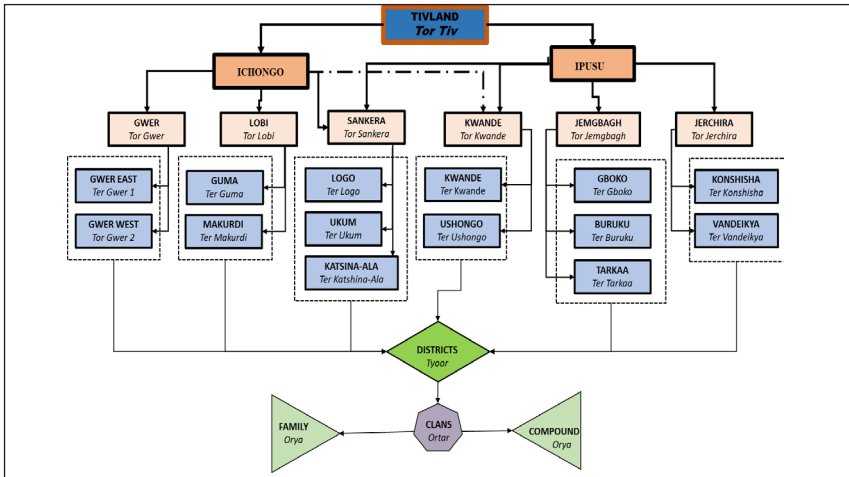


Figure 4: The sociopolitical structure of the Tiv people

Source: Authors’ conception

The family

The compound as a unit of communal life consists of a father and mother and their direct children (Anjov 2013; Bohannan and Bohannan 2017; Torkula 2001). It could also include the extended family, other relatives of a compound head and wives (if the family is polygamous). When a

compound splits into different constituents, probably due to the death of the head, each wife is given a piece of land to settle on with her children, forming another family unit. The first wife and her children are often left in the old compound locally called *Tse* (Ogundele 2005a; Torkula 2001). The head of each newly formed family unit, usually the oldest male son, automatically becomes the head of their new household.

The compound

Among the Tiv, a compound houses a group of individuals who share specific rights and responsibilities. The compound's residents often form an extended patrilineal family whose head is known as *Orya* (Ahokegh 2014; Tughhembra 2014). The compound head is usually the oldest male, forming a unit with his wife (or wives), young children, unmarried daughters, and adult sons with their wives and children. According to Ogundele (2005a), the compound head has some authority within the compound. People living in a compound may not necessarily be close kin as there may also be guests and strangers (*Or-van-inya*). As Bohannan and Bohannan (1954) assert, an average compound could have ten occupants, but it is usual to come across more significant compounds of up to eighty persons.

Every compound is named after its head (*Orya*) and is controlled by an assembly of male elders (Asor 2013; Tughhembra 2014). Traditionally, the *Orya* chairs this assembly, whose tasks comprise the compound's political, societal, spiritual and economic well-being (Agber and Mase 2014; Ogundele 2005a). *Orya*, as the head of the compound, also has the duty of protecting the daily peace of the compound and resolving differences that may come up between people living in the compound. He is bestowed with the power to chastise and maintain obedience subject to the nature of the wrongdoing. In addition, as noted by Kyoon-Achan (2013), *Orya* has the authority to regulate the location of new houses.

Wegh (1998) stated that *Orya's* capacity to carry out his tasks fairly could unite or scatter the compound. Therefore, every compound head tries to be just and steady in controlling his compound. Compound splits usually occur due to specific events: a re-adjustment following the death of a compound head; a married adult seeking some form of independence and privacy; a particular kind of migration called *Tjev*, meaning 'going to the farm'.

Clan and district

These expansive lineage segmentations connect many compounds into larger geographical units, forming an immediate community called *Ipyaven* (Ahokegh 2014; Ahua 2019). Torkula (2001) states that Tiv people believe in geographical continuity for about twenty generations. The clan is concerned with groups activated for specific rituals and marital purposes. A collection of clans with a common lineage forms a district, *Tar*, with a head, or *Tyoor* (Adega 2011, 2013). In today's sociopolitical setting, most districts have become 'political wards' (Asor 2013:94) to allocate polling units and elective positions.

Above the ward hierarchy is the local government council, a collection of districts traditionally headed by a second-class chief, or *Ter* (Tughhemba 2014). A leader, or *Tor*, administers two or more historically related local government councils. Today, Tivland has rulers at the level of *Tor* in Jerchira, Jemgbagh, Kwande, Sankera, Gwer and Lobi (Gwa 2016; Tughhemba 2014). Both *Ter* and *Tor* preside over traditional matters at their corresponding levels and are members of an overall structure called the Tiv traditional council.

The Tiv nation

The Tiv nation is the total collection of families, compounds, clans, districts and divisions in Tivland (Anjov 2013). It is the largest unit, comprising the territory of Tivland and its sovereignty, stratified by a segmented system of patrilineal descent groups (Ahua 2019; Tughhemba 2014), with balanced opposition between sections within the system as the basis for the political organisation. The supreme leader of the Tiv people is called *Tor* Tiv and is traditionally a male (Ahua 2019). The selection of *Tor* Tiv is based on the principle of *Ya-Na-Angbian* (Tughhemba 2014), a rotational tradition between Ichongo and Ipusu (Shishima 2018), the two sons of Tiv progeny, who represent the two genealogical divides among the people.

Materials and Methods

The research design for this study was a qualitative data collection and analysis strategy based on the Means-End Chain (MEC) model. As part of the MEC research methodology, laddering interviews were conducted to gather the data. Initially developed for marketing research, laddering involves about thirty minutes of one-on-one in-depth conversation, focusing

on why product features (house) are essential to a client (Zinas and Jusan 2017:9) which are influenced by personal values utilizing the Means-End Chain (MEC).

This study conducted twenty-four interviews, above the required minimum sample size of twenty people for an effective MEC inquiry (Miroso and Tang 2016; Skalkos *et al.* 2020). Purposive sampling was employed to choose respondents from three local government areas in Benue State – Makurdi, Ukum and Vandeikya – based on their experiences with Tiv housing. The respondents were community leaders, local builders and indigenous house-owners, specifically selected for their knowledge, experience and competence in Tiv indigenous housing, as shown in Figure 5.

Crosstab Criteria									
Demography	1.1 WALL SHAPE	1.2 WALL MATERIAL	2.1 ROOF SHAPE	2.2 ROOF FRAME	2.3 ROOF COVER	3.1 COMPOUND SHAPE	3.2 COMPOUND SETTING	3.3 SETTLEMENT PATTERN	Total (unique)
Location = Makurdi L.G (9)									
Position = Community Leader	2	2	2	2	2	2	2	2	2
Position = Local Builder (1)	1	1	1	1	1	0	1	1	1
Position = House Owner (5)	5	5	5	5	5	5	5	5	5
Position = Women Leader ...	1	1	1	1	1	1	1	1	1
Location = Ukum L.G (7)									
Position = Community Leader	0	0	0	0	0	0	0	0	0
Position = Local Builder (2)	2	2	2	2	2	2	2	2	2
Position = House Owner (4)	4	4	4	4	4	4	4	4	4
Position = Women Leader ...	1	1	1	1	1	1	1	1	1
Location = Vandeikya L.G (8)									
Position = Community Leader	1	1	1	1	1	1	1	1	1
Position = Local Builder (3)	3	3	3	3	3	3	3	3	3
Position = House Owner (3)	3	3	3	3	3	3	2	3	3
Position = Women Leader ...	1	1	1	1	1	1	1	1	1
Total									
Total (24)	24	24	24	24	24	23	23	24	24

Figure 5: Case classifications of the 24 interview participants on location and position
Source: Researchers’ fieldwork

Social, cultural and economic meanings and values regarding the housing and settlement patterns of the people were elicited using the MEC. The results were coded, cross-tabulated, presented in word clouds and hierarchically mapped for Content Analysis using Nvivo 12 software. The tabulation, word cloud and hierarchical value map (HVM) were coded according to the ladders of Attributes (A), Consequences (C) and Values (V). The respondents’ information was tabulated with case classifications such as gender, location and position, and then semi-structured answers were grouped into their respective nodes.

Results

A ladder in MEC may be defined as a series of answers that establish linear or branching links during an interview. Figure 6 summarises the content of the twenty-four responses, extracting general and sociocultural meanings and values surrounding Tiv dwellings. From known to unknown (Shafique and Majid 2020; Zinas and Jusan 2012) and tangible to abstract characteristics (Johnson *et al.* 1992), housing as a complex entity was divided into eight components: wall shape, wall material, roof shape, roof frame, roof cover, compound shape, compound setting, and overall settlement pattern.

This study was concerned specifically with the three components of compound shape, compound setting and the overall settlement pattern of the Tiv people because these are perceived to be directly influenced by socioeconomic activities. Individual houses may have little or no connection to farming occupation, expression of communal living and the people's general setting. On the other hand, dispersed settlement patterns and open compound settings develop over time to reflect their inhabitants' socioeconomic occupation (farming), among other sociocultural community activities. Though the research was done based on the physical attributes of the built environments, this article highlights the compound setting and settlement patterns because they show a more concrete manifestation of the influence of the people's occupation and economic activities.

Respondents first recognised the most concrete features at the attribute level, including shapes, settings and spatial relationships. Then, abstract meanings and consequent functions were identified, leading to the final values to explain the 'why' of each selected component (Zinas and Jusan 2017:8) made based on the behavioural dynamism of people. In this cosmic dynamism, they keep shifting from one stage to another, within the same cosmic space. Housing preferences and choices, like any other life interests, therefore, operate within this framework. Unlike merchandised product brands, housing brands are hardly known, probably because of the heterogeneous nature of the housing product - the house. However, very little is known about the relevant housing attributes. As illustrated in Figure 6, the responses were coded into nodes, and then analysed and explored in a word cloud.

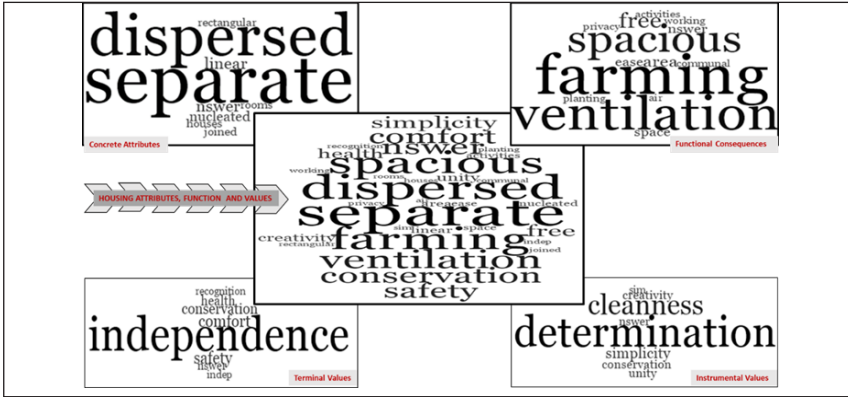


Figure 6: Word cloud indicating the determining factors in Tiv Indigenous housing and settlement
 Source: Authors’ conception

With data collected from twenty-four respondents, the components are deemed valid with up to four direct links, called cut-off points (Fabrizzi *et al.* 2017; Miroso and Tang 2016). The responses were classified according to the MEC hierarchy of Attributes, Consequences and Values. Additionally, Figure 7 shows a visual representation of the relationships using a Hierarchical Value Map (HVM).

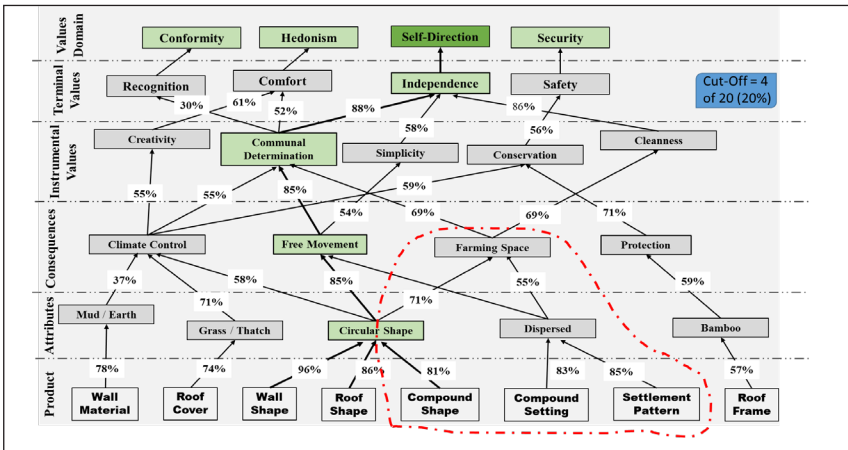


Figure 7: Hierarchical Value Map (HVM) shows the relationship between dispersed compounds, settlements and expansive farming space
 Source: Authors’ conception

The relationships are shown in the HVM by arrows of varying sizes, with thicker lines indicating stronger relationships (Lin, Jeng and Yeh 2018). Generally, links with less than four interconnections are considered insufficiently strong to be mapped. Whereas connections of four to nine links are considered moderate, ten or more are considered very strong. Alongside the directed arrows is the mean frequency of mentions, represented as a percentage of connections in a particular node.

Discussion

As shown in Figures 6 and 7, the findings indicate response variations as to why each quality was essential to the respondents. The map was created by taking the average responses to the importance of compound shape and setting and settlement pattern.

The round form of the Tiv houses, according to the responses, represents their cultural heritage, which, together with their circular compounds, enables their inhabitants to move freely in their natural environment. As summarised in Figure 8, their dispersed constructed environment provides spacious land between homes for farming activities, which is the main socioeconomic occupation of the Tiv people. Their collective engagement in the physical activities of farm cultivation and housing construction also demonstrates the people's communal determination to live sustainable and independent lives, with some degree of privacy, especially the young adults.

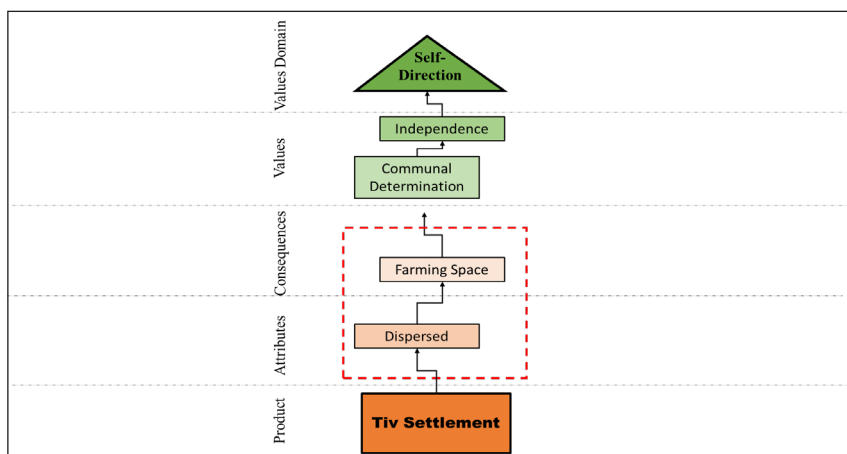


Figure 8: Dispersed settlements offer plenty of space to support farming activities. Source: Conceptualisation by the authors

Earlier findings by Ajekwe and Ibiamke (2017) indicate that most new compounds result from young people's desire for independence and privacy as a manifestation of their liberty and self-direction. According to Aboh (2005), the Tiv people value freedom and self-determination, as seen in their struggles since colonial times.

The description of Tiv settlements as 'planned, nucleated and agglomerated into distinct castes' (Agber 2017:424) may have limited application in more extensive compounds, village squares and other peri-urban communities. It is also conceivable that the 'nucleation' scenario could have been a characteristic of the precolonial era when the Tiv inhabited hilltops and slopes (Ogundele 2005b:2). Though the general settlement pattern may be seen to comprise nucleated compounds with isolated, individualised houses spread over a challenging terrain (Uji 2021:6), many view Tiv built environments as being dispersed, scattered and spontaneous (Ohiaeri 2020), reflecting their socioeconomic focus on agriculture, which requires adequate land for shifting cultivation practices (Tughhembra 2014).

The dispersed settlement pattern of Tiv people is seen to be connected historically to their 'dispersal' from *Swem* into the Benue Valley (Aluaigba 2011:88) and their eventual settlement based on patrilineal communal groups described as 'segmental opposition' (Torkula 2001; Tughhembra 2014). The people live in defined kinship groups and form traditional associations for cooperation in farming and construction, among other communal practices. Their dispersed settlements permit farming as the main socioeconomic occupation and the cultivation of plantations, orchards and garden crops, which contribute to the formation of a climate-friendly, gently landscaped environment. Although the freestanding huts aggregated around a central compound may be seen to express a desire for communal living, the settlements are dispersed enough to provide ample space for farming to achieve family subsistence and economic sustenance.

On the other hand, Tiv houses suffer the negative consequences of perishable materials, vulnerable to erosion and fire, and require regular maintenance. The dispersed settlement pattern also exposes them to insecurity and attacks, mainly external to their environments.

Though all living things require the basic needs of food and shelter, the human desire to attain the social, cultural, economic, religious and psychological levels of esteem and self-actualisation condition people's long-term activities to achieve more abstract fulfilling needs (Maslow 2000). Based on the hierarchy of needs, Dzurgba (2016) notes that a society that

primarily emphasises physiological needs such as food and shelter will find it difficult to develop like others who work towards fulfilment and actualisation. Farming as an occupation among the Tiv people could, therefore, be seen as an expression of determination to achieve food security and live a comfortable and fulfilling life. Therefore, this study agrees with Rapoport that social, cultural, economic, religious and psychological factors are the primary influences on the form of people's houses.

Conclusion

This study sought to establish the relationship between the socioeconomic occupation and the formation of housing and built environment among the Tiv people of Benue State in central Nigeria. The study reviewed the social, economic, and political environment of the people and highlighted the compound setting and settlement pattern as the main aspects that relate directly to their farming occupation, as well as their communal nature and sociopolitical setting. The study conducted laddering interviews to discover the meanings and values that connect the Tiv indigenous settlement pattern and their socioeconomic activities. The results show that most compounds and settlements are circular and built around aggregated houses in an overall dispersed setting. The dispersed settlements provide ample space for farming activities, ventilation and a clean environment. Generally, the local houses and settlements reflect the people's cultural heritage while providing essential comfort in a natural setting. The settings further reflect the people's collective determination to live a simple lifestyle and achieve some degree of privacy for ultimate independence, especially among younger adults.

Farming, as the most significant socioeconomic activity of the traditional Tiv people, influences their dispersed settlement pattern. However, while the people may still prefer to live in expansive environments to be able to continue farming, authorities should make conscious efforts to aggregate the settlements based on their respective sociocultural delineations. Nucleating dispersed hamlets into larger settlements can create more farmland for mechanical cultivation to fulfil their socioeconomic occupation, enhance security and mitigate the protracted contests for land. To also ensure the comfort and cultural sustainability of the people, new housing developments in the future should consider their mainstream values of communal living and settlement preferences for farming activities. This recommendation should be relevant to the government, developers, designers, planners and other housing stakeholders.

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Conflict of Interest

The authors wish to affirm that this study has no potential conflict of interest.

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Maternal Healthcare and Health Policy Planning in Tanzania, 1961–1970s

Veronica Kimani*

Abstract

The period immediately after independence in Tanzania was marked by intense planning for the country's development. Part of this planning involved the healthcare system and was aimed at addressing the grave dangers posed by life-threatening diseases. Improvements in healthcare included the expansion of medical facilities and staff. The government identified maternal health as vital in revamping public health. It understood that the well-being of mothers and children was fundamental for the prosperity of the newly founded state. The focus, however, was on rudimentary health provisions. This article examines health policy planning in Tanzania immediately after independence. Using examples from maternal health, it argues that healthcare planning after independence was still largely shaped by the measures developed under colonial rule despite the optimism about a sovereign future. This was mainly because the problems and plans that had arisen during colonialism remained in existence after independence. The article uses archival, oral and secondary sources to show how attempts to shift health policies were hindered by poor planning, lack of funds, inadequate staff, gender relations and the choice between healthcare and other needs. It examines how the newly independent government negotiated the quest for better healthcare, especially maternal health.

Keywords: development; future making; healthcare; maternal health; social policy; planning; postcolonial; Tanzania; welfare

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Résumé

Immédiatement après son indépendance, la Tanzanie a été marquée par une intense réorganisation du pays vers un avenir meilleur. Ce changement concernait en partie le système de santé et visait à répondre aux graves dangers posés par les maladies mortelles. Pour améliorer la santé, l'expansion des établissements sanitaires et celle du personnel étaient incluses. Le gouvernement a déterminé la santé maternelle comme essentiel pour la réorganisation de la santé publique. Il avait compris que le bien-être des mères et des enfants était fondamental pour la prospérité de l'État nouvellement fondé. Toutefois, l'accent a été mis sur des dispositions sanitaires rudimentaires. Cet article étudie la planification de la politique de santé en Tanzanie immédiatement après l'indépendance. À l'aide d'exemples tirés de la santé maternelle, il soutient que, malgré l'optimisme quant à un avenir souverain, la planification des soins médicaux après l'indépendance a encore été largement façonnée par les mesures développées sous le régime colonial à cause des problèmes et projets qui avaient vu le jour pendant la période coloniale et qui se sont poursuivis après l'indépendance. L'article s'appuie sur des archives, des sources orales et secondaires pour montrer comment les tentatives de réorientation des politiques de santé ont été entravées par une mauvaise planification, un manque de fonds, un personnel non qualifié, des relations hommes-femmes et le choix entre la santé et d'autres besoins. Il examine comment le nouveau gouvernement indépendant négociait à la recherche de meilleurs systèmes de santé, en particulier la santé maternelle.

Mots-clés : développement ; construction de l'avenir ; santé ; santé maternelle ; politique sociale ; planification ; postcolonial ; Tanzanie ; bien-être

Introduction

On 9 December 1961, Tanzania attained independence. Like many African nations that experienced colonialism, the optimism for a better future was high. The imagined future went beyond political independence to encompass economic autonomy and social progress, including a focus on good health for the population. At the time, there was rampant infant and maternal mortality, disease and malnutrition, leading to low life expectancy and productivity. Therefore, planning for better health, though difficult, was necessary to achieve an auspicious future for the nation (Green 2007:1). However, for many African countries, planning for healthcare after independence inevitably reflected colonial plans and strategies (Malowany 1997:236; Ombongi 2011:353). Until the 1960s, when most African states became independent, healthcare policy planning was still relatively nascent.

Only a few historical studies have focused on health, and those that do mainly concentrate on colonial controversies, missionary medical works and neoliberal policies (Beck 1970; Meredith 1977; Hunt 1988; Vaughan 1991; Kanogo 2005; Crozier 2007; Masebo 2010; Jennings 2016; Dreier 2015). Most of these studies posit that during the late nineteenth century European colonial 'civilising mission' to Africa, the health of Africans was never a priority. The immediate focus of Europeans was the occupation and exploitation of the territories. However, on arrival in Africa, Europeans were presented with hurdles to their goal of exploiting the acquired territory. One such obstacle was tropical diseases. This hurdle necessitated the formulation of policies to manage or counter this danger.

In East Africa, malaria and trypanosomiasis were major concerns. The limitations of existing medical facilities, personnel and equipment were enormous and forced the existing medical practitioners to perform tasks beyond their competencies (Beck 1970:2; Ngonyani 2018:5). In addition, healthcare had developed slowly, driven largely by its subservient role in colonial capitalist interests in Africa, principally in supplying enough healthy labour for plantation agriculture. The need for healthy and consistent labour in agriculture and infrastructure building was among the many reasons workers' health later became a concern of the colonial government. Furthermore, in the first decades of the twentieth century, the colonial government had to face the challenge of a low birth rate and declining population, both at home and in Africa (Vögele 2010:131; Lindner 2014:214; Davin 1978:11). A shrinking population was alarming to the colonial government because agriculture was the backbone of many economies and '... without black labour, our colony would never be able to send to Europe the wealth buried in [*Africa's*] soil' (italics added) (Hunt 1988:405).

This phase of colonialism coincided with the twentieth-century concept of the welfare state, a period when European states were evolving into guardians of social welfare. The idea was soon exported to the colonies within the framework of what has been described as 'colonial developmentalism'. This followed the enactment of the British Colonial and Welfare Act, in 1929, which matured to encompass colonial developmentalism (Zezeza 1997:218). From the mid-1930s, social policy became a major preoccupation of 'modern' governments. This concern was fast-tracked by the two world wars when the state emerged as the sole structured entity capable of restoring order to social policy. A series of legislation and economic distribution subsequently gave value to social policy interventions (Pekarová 2017:104; Ombongi 2011:355). Equally forceful in enhancing the value of social

policy were trade unions and social reformers, who demanded that the state take responsibility for welfare (Midgley and Livermore 2009:28). By the late 1930s, welfare, social policies and the state had become inseparable and concern for welfare became a symbol of advanced capitalist societies (Malpass 2005:3).

The interwar period was problematic because of the economic recession that came after World War I. Significant resources were committed to the war effort, which had disrupted economic progress. Nevertheless, the war highlighted the importance of the question of well-being. According to Anne Beck, this period in Africa forced a new focus on 'native interests' (Beck 1970:2). The colonial governments started health campaigns to teach hygiene and went on to build more hospitals in the colonies, in addition to the existing mission hospitals that handled disease and injuries, among other health problems. After World War II, colonial governments increased funding for the expansion of health facilities in Africa. Although this had the appearance of helping the colonies grow, it was mostly about Britain finding ways to survive tough times during the war and cope with the ascendancy of the USA (Zezeza 1997:223).

The study of African medicine and its convergence with Western medicine leading to conflict, hybridity or medical pluralism has been a subject of inquiry by many scholars. However, the research on health policies and planning in East Africa has not received commensurate attention, except perhaps for a few studies (Achola 2000, 2005, 2006; Ombongi 2011), which concentrate more on the urban setting in colonial and postcolonial Nairobi, Kenya. For the case of Tanzania, most studies focus on health in the colonial period and where they veer away from this, they examine health policies in the context of Ujamaa or in neoliberal times, thus largely ignoring the early post-independence period. Yet, understanding policymaking in these early years is crucial because the period was the spindle upon which development was anchored and from which a change of policy was later imagined or developed. In focusing on the first decades of independence, this article seeks to add to this broader discussion on health as a social policy issue. Using Tanzania as a case study,¹ I show that despite the overarching intentions for the future in many states, historical events informed social policy plans.

Although the historical, ecological and environmental conditions of East African countries are similar, the case of Tanzania remains unique for several reasons. First, its colonial history and status as a trust territory of the League of Nations and later as a mandate of the United Nations largely influenced internal developments. Second, since the political economy and

social organisation of a country are key determinants of its health planning (Feierman 1985:73; Keita 2007:13), the decision to adopt socialism in Tanzania as early as 1962, and the dominance of the Tanganyika African National Union (TANU) party reflected on the development path of Tanzania. In contrast, Uganda and Kenya were more oriented to the capitalist West. Third, the ratio of land mass to the population is a major consideration in planning, and the vastness of Tanzania is a feature that dominates this argument.

Using data from oral interviews, archival sources, government reports and secondary sources, the article shows that planning for health was challenging for the state, thereby necessitating the incorporation of support from voluntary agencies, 'friendly' nations and international actors. Overlaying this support was the inescapable embrace of traditional therapies. Using examples from maternal health, I demonstrate how colonialism and strategies by TANU influenced policy planning in independent Tanzania.

The article has three main sections. The first traces the transfer of medical knowledge and policies to Tanzania under colonialism framed in the guise of the 'civilising mission'. The second section describes the health situation immediately after independence, focusing on the role of TANU and the need for better health in the context of meagre resources. Section three studies the example of maternal healthcare to further illuminate the application of the policies discussed in sections one and two.

The Transfer of Western Medicine to Colonial Tanzania: An Overview

Africans had knowledge of health and healing as they practised traditional medicine before colonial governments and missionaries introduced Western medicine on the continent. For Tanzania, it was the Germans who conceived the colonial political administration, economic production and social amenities that revolved around health matters. The first hospital in what was then Tanganyika was opened by the Church Missionary Society (CMS) in Mamboya in Kilosa, Morogoro, in 1877, but it was in 1888 that the German administration started what Titmus *et al* termed as properly organised medical services (Titmuss *et al.* 1964:1).

The CMS was followed by other Protestant and Catholic mission societies, mainly from Germany and, later, Britain. Missionaries regarded the provision of medical services as insurance for the relevance of their services to the colonial government and Africans (Jennings 2016:153). Despite initial resistance to medical interventions from missionaries in

certain regions, the practice of Western medicine grew and was embraced by communities, even if reluctantly, especially during epidemics. However, this did not eradicate the use of different African traditional therapies. Studies have documented the practice of medical pluralism in Africa, where different therapies were 'complementary rather than competing' (Feierman 1985:73; Malowany 1997:24; Keita 2007; Tilley 2011:181). The competition narrative, perhaps, was a creation of the missionaries to demonstrate the hegemony of their medicine. But in fact, African medicine was still widely used and, indeed, the competition narrative demonstrated that African medicine had some 'life dynamism' (Keita 2007:33). Moreover, what was termed 'Western medicine' was not uniform; it varied depending on the country of origin (Crozier 2007:4).

However, in the politics of civilisation, African traditional medicine was relegated to the bottom as unscientific, less effective, ungodly and primitive (Ranger 1981; Feierman 1985). This perspective was further entrenched after the arrival of European colonialism coincided with a period of outbreaks of human and animal diseases that were previously unknown to Africans; the known remedies for dealing with them were ineffective because of the policies imposed by the colonisers (Giblin 1996:128). Africans were forced to seek help from the Europeans on how to treat these 'new' ailments. Western medicine came in handy here. Rather than using it to treat only these new ailments, the bearers of this medicine, namely the missionaries and colonial officials, deployed it primarily as a tool for engaging with Africans to convince them of the value and superiority of their civilisations. Certainly, European interests had to be 'protected politically and medically' (Nhonoli and Nsekela 1976:7). Although this was interpreted as a win for Western medicine, studies have shown that it simply joined the array of different therapies Africa adopted for different diseases (Feierman 1985; Malowany 1977).

It is not surprising that among the first group of German colonial officials to come to Tanzania were five fully qualified medical doctors and fifteen orderlies (Titmuss *et al.* 1964:2; Nhonoli and Nsekela 1976:8), who set up the first medical department on 1 April 1891. However, the medical services rendered by this department were hierarchical. Priority was given to the military men, then German merchants, and lastly, African soldiers (Nhonoli and Nsekela 1976:8). At this point, most other Africans were not included in the government's health plans. Instead, they were mainly attended by the missionaries, a service that continued well into the twentieth century. Military hospitals in Dar es Salaam, Lindi, Kilwa, Pangani, Mikindani and Mtwara, among other towns, offered services based on race and status; the hospitals cared foremost for Europeans.

Maternity services were generally left to the missionary sisters and were not a concern of the government until the population question came to the fore² (Lindner 2014:215).

In 1894, the German parliament approved the construction of the Ocean Road Hospital to serve grade one patients (Europeans). Consequently, a twenty-five-bed hospital was built that remained exclusively for European use until 1961. In the capital city and many other rural areas, no hospital was constructed for Africans, purportedly because of a lack of funds. Nonetheless, the German Chief Medical Officer, Becker, approached Sewa Haji Paroo, a wealthy Indian philanthropist, who agreed to fund the building of a hospital to serve the non-European population (Tanganyika Ministry of Health 1960:1). On April 15, 1892, Sewa Haji donated 12,400 rupees on condition that the hospital would bear his name (Nhonoli and Nsekela 1976:9). The hospital was opened in 1897 and operated for more than sixty-seven years, until the official opening of Princess Margaret Hospital (later renamed Muhimbili) in 1960. German rule in Tanzania ended abruptly after the end of World War I.

After World War I, the British took over Tanganyika from the Germans. At the time, civilian medicine was in 'a neglected state' (Titmuss et al. 1964:4). Just as the Germans did, the army took over the medical sector. It was only in 1923 that British civil medical research was established (Beck 1970:2). In 1924, the Principal Medical Officer, Dr Shircore, noted that much needed to be done in rural Tanzania. The government responded by trying to develop health facilities and Africanising medical workers by training Africans as wound dressers (Tanganyika Annual Report of the Medical Department 1960:2). However, this did not bear much fruit. In any case, this 'investment' was not considered beneficial to the capitalist interests that drove the colonial state, which manifested in investments concentrated in more 'productive' areas. As Maghan Keita argues, the provision of health went hand in hand with anticipated economic benefits (Keita 2007:49). Thus, the areas that were labelled 'unproductive' were left out of such investment and remained largely undeveloped.

By the 1940s, the demand for medical services was increasing, especially for mother and child health (MCH). Plans for the expansion of the MCH section, for instance, became very visible by 1944. This visibility was driven by a constellation of factors. For a start, demand continued to rise even as a lack of resources and inflation restricted the expansion of MCH facilities. In Dar es Salaam, the facilities were provided in temporary buildings that were mostly unsuitable (TNA/ACC450/108 1944)³. Thus, while many scholars have argued that health centres were concentrated in urban areas, this did

not always mean better services. As argued below, it was clear that the urban poor were also subjected to substandard public health services at the time. In the rural areas, medical services and maternity in particular depended largely on missionaries and traditional midwives.

By 1949, the situation regarding health services was dire, leading the Chief Medical Advisor of the Colonial Office, Dr Pridie, to describe them as being ‘... below the minimum standard of efficiency’ (Titmuss *et al.* 1964:18). Even so, funding remained the main excuse to stall investment in public health services. The 1957 approval by the Legislative Council for the ‘Plan for the Development of Medical Services in Tanganyika’, for instance, was adopted subject to availability of funds (Tanganyika Annual Report of the Medical Department 1957:1). The notion of ‘availability of funds’ is illustrative of how a capitalist logic played a crucial role in determining priorities in health planning (Zezeza 1997:223). The irony is that while the public health sector was developing so slowly, the attitude of Africans towards Western medicine was changing very quickly. By 1958, institutionalised maternity services had become so popular that the government was unable to keep up with the demand (Tanganyika Annual Report of the Medical Department 1958:15). Yet, strangely, in the same year the hiring of staff was suspended because of a lack of funds (Tanganyika Ministry of Health 1958:1). The report by the Principal Secretary in the Ministry of Health in 1959 showed that the demand for health had ‘reached embarrassing proportions’ (Tanganyika Ministry of Health 1959:1). Clearly, health was not a priority to the colonial government. Most women, especially in rural areas, sought the services of traditional midwives.⁴

The Health Situation in Tanzania After Independence

The Commencement of Health Planning in the 1960s

The 1960s saw several African countries break from the yoke of political colonialism. For Tanzania, this happened in 1961 and was followed by intensive planning. It was a time of redefining the future and charting the way forward for the newly independent nation. With Julius Nyerere as its leader, Tanzania identified the priority of fighting against poverty, ignorance and disease (Nyerere 1973:15). Health had now officially obtained national attention. This was also in line with the World Health Organization (WHO) principles as set out in the WHO Constitution adopted in July 1946, where health was outlined as a key concern (WHO 1946). For Tanzania, planning for health was understood as a project of self-determination. To Nyerere, self-determination meant freedom, and being disease-free was an integral

part of this freedom (Nyerere 1973:58). For him and his ruling party, TANU, this was an opportunity to provide to the masses of Tanzania what colonialism had denied them. But was the same intent reflected in planning and implementation?

Apart from the speeches that politicians delivered at rallies, the government had to follow a laid-out plan. In the early years of independence, health policy was included in a three-year plan which was followed by a series of quinquennium plans (Development Plan 1961–64; First Development Plan 1964–69; Second Development Plan 1969–74). Another document that was key for the health sector was the Titmuss Report (Titmuss *et al.* 1964), which recorded the medical situation as discussed below. The plan for the period 1961–1963 was prepared just before independence was officially granted in December 1961. It was based on the information received through surveys conducted by the World Bank. Thus, from the start, Tanzania's planning operations emanated from the perspective of 'outsiders'. This was not unique to Tanzania. For many African states, independence was not a spontaneous moment but rather an orchestrated transition into a colonial dispensation in which institutions like the World Bank would play a critical role.

About GBP 24 million was allocated to the development plan of 1961–1963 (Development Plan 1961:13). But between the competing needs of the time, only 4 per cent (approximately GBP 954,000) of the whole budget was allocated to the health and labour sectors. Thus, the Ministry of Health and Labour received the smallest allocation, compared to 24 per cent and 13.7 per cent allocated to the agriculture and education ministries respectively (Development Plan 1961:13).

The planning of the health sector in the early years of independence was not as optimistic on paper, either. Indeed, in the broad objectives of this plan, health was conspicuously missing and was mentioned only in the analyses of the health department. The underlying theme for the 1961–63 plan was 'laying the foundation for future growth', which was largely based on developing agriculture, education and infrastructure. Just as in the colonial era, emphasis was placed on economic development, and health provision was meaningful only if it facilitated economic gain. It is also worth noting that a substantial amount of the GBP 24 million for the 1961–1963 plan was to be funded through loans and grants (Development Plan 1961:10). This dependency increased in the subsequent years such that the government could not sustain its expenditure, despite the clarion call of self-reliance that started as early as 1962 (Nyerere 1965:22).

Notwithstanding the difficulties of funding highlighted above, there was a notable increase in patients in medical facilities managed by both the government and voluntary agencies (Tanganyika Ministry of Health 1963:18). However, this was not a reflection of the whole country. Some parts of rural Tanzania, where majority of the people lived, had no access to health services (Meredeth 1977:24). Many rural areas continued to rely on voluntary agencies such as missions, even after independence. Most of the available medical services—largely curative at the time—were located in urban areas. Even so, the services were ‘scattered, partial and uncoordinated’ (Gish 1975:8).

In 1961, there were only 1,236 dispensaries, 25 health centres, 204 antenatal clinics and 195 child health clinics in Tanzania (Ngonyani, 2018:5). These were not enough given the vastness of the country and the size of its population, estimated at 11 million. The first step was to address the distribution of health facilities, with an emphasis on the rural areas. The government aimed to have a hospital of not less than 200 beds capacity per district by 1969 (First Development Plan 1964:69). However, it was later noted that although building hospitals would not cater for the needs of the majority, dispensaries and rural health centres (RHCs) would. This mirrored the efforts of the Principal Medical Officer, Dr Shircore, who as early as 1924 identified the rural dispensary system as the panacea for rural health issues (Beck 1970:148).

The basic role of the RHCs and dispensaries was to offer first aid and MCH services. They also remained centres of health campaigns, as in colonial times. Thus, many RHCs and dispensaries were built. In Ifakara, for instance, the Kibaoni dispensary was built, although it was overshadowed by St Francis Hospital, which was one of the big hospitals not only in Kilombero District, but in Tanzania as a whole. In places such as Kidatu, the Kilombero Sugar Company had its own hospital as early as 1960. This demonstrates the role of voluntary agencies and NGOs in the provision of medical care.

Beyond the challenge of facilities, the number of trained African medics was still low. According to Gish, the existing chain of dispensaries was ‘ill-equipped and manned by staff who were only capable of dispensing pharmaceutical palliatives, when these were available’ (Gish 1975:8). The problem of inadequate medical staff was enormous. For a population of slightly above 11 million, there were 400 doctors, only 178 of whom worked for the government at independence (Titmuss *et al.* 1964:29). Worse still, out of the 400, only eighteen were of Tanzanian origin (Nhonoli

and Nsekela 1976:1). The scarcity trickled down to other medical workers, including Medical Assistants (MAs), Assistant Medical Officers (AMOs), Rural Medical Aides (RMAs) and midwives. In 1961, there were only thirty-two AMOs, although this number increased to 105 in 1967. The only options for health in the country were to continue to rely on expatriate medical staff or substantially increase the training of new local staff.

The use of expatriates was a direct contradiction of the logic of decolonisation and had been highly condemned by the nationalist movements during the struggle for independence (Ayoade 1988:106). It was even more problematic because most expatriates, especially the British, opted to go back to Britain in 1963, attracted by the compensation scheme offered by their government (Tanganyika Ministry of Health 1963:3). Thus, there was a massive exit through the retirement of senior staff and resignations. Furthermore, within the existing local medical staff, excessive drunkenness and stealing, leading to dismissal, were reported (TNA/ACC 450/HE 1424/6 1973; Ngurumo 1964b:4).

In addition, most qualified health workers went overseas for further studies or to Dar es Salaam for an upgrade course in the new medical school that was opened in July 1963 (Tanganyika Ministry of Health 1962:2). Perhaps the government allowed medics to go abroad for further studies because of the many opportunities that were offered through scholarships by various governments, especially the United Kingdom, Japan and, later, China (Ngurumo 1965b:2; TNA/HE/1674/5 1962; TNA/HE/A/90/16 1977; TNA/HEA/90/5 1962). To overcome the shortage of medical staff, Tanzania had to devise a plan to train healthcare personnel locally.

Training medical staff in Tanzania

The establishment of the Dar es Salaam Medical School (DMS) in 1963 marked a significant step towards training medical personnel in Tanzania, intending to reduce the reliance on overseas institutions and Makerere University in Uganda, which by then was under the umbrella of the University of East Africa (Illife 1998; Kithinji 2012). However, training medical staff was not easy in Tanzania. First, the number of tutors was insufficient for the task. Also, too few individuals were interested in or qualified to pursue medical courses. The problem of getting qualified people for training was inherited from the colonial education policies that had relegated Africans to the lowest level of education, ostensibly to help them acquire 'practical' skills, which meant that most did not get past the basic level of education. In this racialised form of education, Europeans and Asians were automatically

groomed for higher education; its gendered character meant that African women were largely left out (Mbilinyi 1979:238; Kahama, Maliyamkono and Wells 1986:22).

Nevertheless, the addition of the DMS was a boost to government facilities since most of the already existing centres were run by voluntary agencies. For instance, two RHCs with training goals were opened in 1961—one in Ifakara, under Professor Geigy from Switzerland, and the other in Bukoba, with aid from Scandinavian countries (Tanganyika Ministry of Health 1962:2). Just as in the colonial days, when voluntary foreign agencies played an important role in providing health services, so it remained the case that the central government in independent Tanzania could not be the sole provider of health services.

One of the goals of the DMS was to produce a ‘multipurpose’ nurse who was to be trained for three years to replace the three-year training of a hospital nurse and the two-year training of a health nurse (Titmuss et al. 1964:29).⁵ It was also expected that in the last six months of the training, the female students would get midwifery training. In 1968, DMS was integrated to form what became the Faculty of Medicine at the University of Dar es Salaam.

To enrol in the university medical course, the entry requirement was a complete secondary school level education. This enabled the student to join a five-year course followed by one year of pre-registration medical employment. The full cost of training a medical doctor was USD 40,000, which was too expensive compared to USD 2,500 and USD 2,000 for the medical assistant and the rural medical aide respectively (Gish 1975:12). Hence the government preferred to train at lower grades and then upgrade later. The qualification for a medical assistant took eleven years of basic schooling plus three years of medical training; the AMOs were trained as medical assistants, and after four years of work experience received eighteen months of upgrading courses. However, in practice, the AMO took on the work of a graduate doctor and was the only ‘known doctor to the people in the rural areas’ (Gish 1975:13).

Upgrading was the only feasible solution for staffing because such courses were cheaper and consumed less time. At Ifakara, many retired health workers were a product of upgrading, which remained an important feature in Tanzania’s health sector.⁶ Yet, the question of the quality of local training arose because the government had lowered the entry requirements to get more people to train as medical workers (Tanganyika Ministry of Health 1962:2). At the time, but also until as late as 1975, most doctors in Tanzania were still trained outside the country whereas medical auxiliaries

were trained locally. This continued to exacerbate the dualism in the hierarchy of the medical personnel and medical disciplines in Africa, where doctors who were trained abroad were seen as better than the lower cadres of nurses, midwives and medical assistants, most of whom were trained locally (Keita 2007:23).

In rural Tanzania, staffing was problematic because the ‘best’ doctors were located in the cities where they were better paid and got the opportunity to practice what they were taught in ‘modern’ medicine. This unequal distribution of medics remained a problem that worsened even as the government of Tanzania tried to resolve it. In 1977, the government restricted private medical services, which not only led to further deterioration in service delivery but also to brain drain (Illife 1998; Bech *et al.* 2013). Throughout this period, and in the policies initiated around health matters, the ruling party, TANU, played a central role in shaping decision-making.

TANU and the Structure of the Health Services in the Early Years of Independence

Despite the slow start, the government health division had programmes and made visible progress that partly followed the recommendations of the Titmuss Report (Titmuss *et al.* 1964).⁷ The report gave an overview of the situation of the health sector and made recommendations and projections for the future. It was termed ‘the most valuable document’ for the medical planning committee (Tanganyika Ministry of Health 1963:1). The report came out the same year as the first development plan of 1964. Unlike the 1961–1963 plan, which was based on World Bank surveys, there was optimism in the 1964 plan as the first ‘homegrown’ plan. Therefore, it was expected to tackle the issues in the country better from an ‘insider’ perspective. Some of the proposals of the Titmuss report, especially the emphasis on rural health, were incorporated into the 1964 plan. Thus, the overall thrust for the health division became the extension of medical services to the rural areas and a concentration more on preventive healthcare than curative measures. This move was adopted and given agency by TANU.

TANU officials were important agents in harmonising the functioning of government, which operated at two levels—the central or national level, and the local or regional level. However, all the policies were made by the central government and trickled down to the local level. According to Titmuss, the difference between the central and the local government was very thin, ‘geographical rather than functionality’ (Titmuss *et al.*

1964:68). The relationship between the two levels was not comprehensive, especially on the part of the voluntary agencies, most of which worked in the rural areas.

For the medical sector, the organisation was structurally not different from the colonial hierarchy. At the top of the hierarchy was the health minister, followed by the chief medical officer (CMO), deputy chief medical officer, three principal medical officers, the principal matron and the chief health inspector, in that order (Tanganyika Ministry of Health 1962:1). These echelons were based in Dar es Salaam, and by 1964, some members of TANU were complaining about the concentration of amenities and industries in the city (Ngurumo 1964:1).

Ironically, despite the call for a unitary system after independence, decentralisation of some functions was practical but problematic. Maghan Keita provides a two-fold explanation for decentralisation in the case of Senegal. On the one hand, the local government was given the recognition that was characteristic of principles of democracy and modernity, but on the other hand, decentralisation seemed like an abdication of responsibility by the central government (Keita 2007:161). This was the case in many African states. In Tanzania, health provision was decentralised from the regional level, but policymaking was not.

At the regional level, the regional medical officer (RMO) acted on behalf of the CMO. Under the RMO were the district medical officers, representing each of the districts (Titmuss *et al.* 1964:34). Under this hierarchy were the medical practitioners divided into four categories: university graduate medical doctors, AMOs, medical assistants and RMAs. Just as in the colonial period, medical services were still organised on a provincial basis, with the state as the controller (Ombongi 2010:355). The only change of policy in 1961 was that provincial and RMOs were assigned medical duties on top of their administrative roles (Tanganyika Ministry of Health and Labour 1961:1). In addition to addressing the problem of staffing, the move was to keep the administrators acquainted with the medical issues that their provinces were facing.

Policymaking in the newly independent country was centred around TANU and its chairperson, Julius Nyerere. Therefore, the professional medical hierarchy discussed above was interwoven in the party politics of the TANU. TANU was visible at all the stages of health policymaking, such as agenda setting, priority setting, appraisal, implementation, monitoring and evaluation, and policy maintenance or termination (Milevska-Kostova *et al.* 2013:4). Thus, policymaking and political decisions were inseparable (Milevska-Kostova *et al.* 2013:4). Starting a new health facility was a

political decision. While responding to a question in Parliament in 1973, the minister of health told the House that if a decision was made to have two health centres in a district, then it was the role of the leaders to decide the location of the facilities (TNA/HE/1674/5). Request for licences to practise, even for traditional healers, was done through TANU branch leaders (TNA/HET/120/15). Any medical officer who wanted to upgrade to another level had to write a letter through the TANU branch leader (Ngurumo 1965b; TNA/HE/A/90/16 1977), and being a TANU member was an added advantage, though it was never made an official policy.⁸

There were pros and cons of TANU being the only party in policymaking. It was common for doctors to receive orders from TANU leaders, which often led to conflicts. There is evidence of meetings called to restore order between non-medical workers—mainly TANU leaders—and medical doctors, with the latter blaming the former for behaving ‘as if they were above the law’ (TNA/HQ/1.30/21/11/1975). In some cases, medical workers were obliged to leave their duties to attend to TANU activities. For instance, doctors would be ordered by TANU leaders to travel to the villages to help the sick; and a TANU branch chairman orders the same doctor to stop his work and join *maandamano*.⁹ Thus, the relationship between social policy and the welfare state was evidently inseparable (Aravacik 2018:103).

From the TANU party leader to the village head, there was an elaborate hierarchical system of how things were to run. TANU members were active in popularising health policies and the construction of dispensaries (TNA/HQ/1.30/21/11/1975). The TANU Youth League offered labour in the construction of dispensaries.¹⁰ TANU leaders went around the villages announcing the dates for immunisations and important meetings with *Bwana afya*.¹¹ One interviewee added that being a member of TANU was a silent consideration for jobs and positions.¹² Members of the public would complain to TANU leaders about poor services in hospitals. When the challenge was beyond the local TANU leaders, it was taken to a higher authority. In 1973, for instance, TANU men wrote to the minister complaining of the lack of medicine in dispensaries and the laxity of doctors (TNA/HEA/150/2/411 1973). Some of these challenges were occasioned by poor pay for doctors, leading to a lack of motivation (Illife 1998; Bech *et al.* 2013:63).

However, TANU faced challenges in the process of implementing health policies because there were other pressing problems to be tackled, such as building the economy through agriculture and improvements in education. Indeed, after the 1967 implementation of *Ujamaa*, more schools than dispensaries were built, and working on *shamba la Kijiji* and *Mfumaki*¹³ was emphasised. These areas seemed to have been the major preoccupation of the

TANU government. Problems such as a lack of finances, a rapidly growing population, inflation and ever-rising economic demands, necessitating upward revision of salaries and wages to an already strained sector, were apparent (Bech *et al.* 2013). What did this mean to particular medical departments? It was even more problematic to address the specificities of departments within the health sector, as shown in the maternal health policies below.

Planning Maternal Health in the Early Years of Independence

After independence, the government of Tanzania considered MCH vital in addressing public health and other maladies that could be prevented at or before birth. There was the need to address maternal mortality, which according to the Annual Report stood at 232 (Tanganyika Ministry of Health 1962:26); infant mortality was at 140 per 1,000 live births in 1961 (Titmuss *et al.* 1964:59; Macrotrends n.d.). Yet, it is possible that the numbers were higher because of the challenge of record-keeping at the time. It was assumed that the solution would be found by encouraging mothers to attend health facilities for delivery and follow-up.

From 1961 to 1964, the medical reports from the health division reported increased demand for MCH every year. In the 137 antenatal and 190 child health clinics available countrywide in 1961, 60,000 mothers and 54,000 children were attended to. In the same year, 67,000 women sought maternity services compared to 23,000 in 1951; still, only 17 per cent of the deliveries were handled by trained staff (Titmuss *et al.* 1964:37). This meant that many of the births occurred at home because the clinic was not always better than home delivery. Lack of water, the presence of male medical staff, and the mixing of the sick and the pregnant also made some people stay away from the clinic (Titmuss *et al.* 1964:68; Kanogo 2005:171). For others, like Zuhura,¹⁴ home delivery was a choice they made because it was holistic: '*Nyumbani ulikuwa unapata mtoto, unatibiwa na dawa za kienyeji na pia mtoto anapewa dawa ili asipate kilala*'¹⁵ (at home, the mother and the baby were treated with traditional medicine to prevent diseases). The government wanted every woman to be attended to in a medical facility, but, as already noted, medical facilities and staffing were a problem. This explains why, despite the government's wishes, delivery at a health facility was not understood as official policy.

The delivery of babies was the most common service provided at dispensaries and RHCs in rural areas. Yet, most of these dispensaries did not have a maternity section. Only a few of the 'normal' beds were set aside for maternity cases. Even in established hospitals, the maternity section

was under-resourced. The policy was that out of one hundred beds in a general hospital, sixty were meant for short-stay admission, fourteen for patients with mental illnesses, fourteen for tuberculosis patients, five for infectious diseases and seven for obstetrics (Titmuss *et al.* 1964:43). It was not clear what informed this policy. Still, seven beds for a section that was described as the 'busiest' meant that overcrowding in the maternity ward was inevitable. In such a situation, some maternity wards became a breeding ground for contamination and infections.

By 1961, the total number of beds in all health facilities was 7,028, of which only 462 were obstetric beds (Titmuss *et al.* 1964:45). Worse still, of the 462 beds, 369 were in regional and district hospitals, which were located in urban areas (Tanganyika Ministry of Health and Labour 1961:1). These numbers portray how bad the situation was in the rural areas. It can correctly be argued that delivery was certainly viewed as just a 'normal' procedure until there was a complication that demanded a visit to a medical facility.

The neglect of maternal health was partly because the medical field and the policymaking arena were male-dominated and thus underappreciated. For this reason, in rural areas, most births were attended to at home either by traditional midwives or traditional birth attendants (TBA). Most of the people lived in rural areas, but medical services there were still rudimentary, illustrative of a colonial legacy that reproduced capitalist tendencies. The policy was that the central government should not establish a dispensary where the local government had one already. In addition, the government was to hand over dispensaries to the local authorities to maintain or administer them (Tanganyika Ministry of Health 1963:31). This meant that most rural areas received less in terms of medical development.

The lack of facilities was exacerbated by the problem of staffing. By 1963, it was clear that the Tanzanian health sector needed auxiliary maternity staff, who were easier and cheaper to train. It was assumed that auxiliary staff would be retained in the villages because most graduate doctors were based in urban areas. One of the government interventions was to lower entry requirements for some courses, to be upgraded later (Tanganyika Ministry of Health 1963:1). The most important auxiliary medical staff who significantly impacted maternal health were the village midwives, village medical helpers (VHM) and the MCH aides (Gish 1975:12). Having attained seven years of primary schooling, a VMH was selected by fellow villagers or through the church to undergo six months of training at a district hospital after which they would work in the villages in collaboration with the nearby RHC.

Collaborating with the RHC and dispensaries was a way of getting medical services closer to homes. However, there was disagreement on who to train: on the one hand, young women were more suitable for the job, but on the other hand, it was not socially acceptable for them to perform the delivery and maternity duties. This is because, initially, Africans believed that midwifery was meant for not just any female but a woman which had moral standing in society, preferably married and a mother herself. This resonates with Thomas Lynn's 'Politics of the Womb', where the notion of being 'biologically able but not socially consecrated' is well articulated (Lynn 2003:10). Although training girls straight from school was the easiest and perhaps the most successful way, the government also resorted to training older women who would be accepted by their fellow villagers (Tanganyika Ministry of Health 1963:33). This was a replica of the dilemma of the missionaries in the colonial days: when they wanted to train young as opposed to old women, they were believed to be propagating bad delivery and child-rearing techniques, as well as 'satanic' habits (Bruchhausen 2003:105).

Secondly, many young women did not have the prerequisite qualifications, as a result of the gendered character of the education system, in which sending only boys to school was preferred. Moreover, young women who had the qualifications would train but later quit their jobs for other reasons, including marriage. After all, taking care of the home, husband, and children was a more socially expected and accepted trajectory of life. Those who continued working had to look for health facilities where their husbands had been posted. In Ifakara, nearly every retired female health worker I spoke with answered the question, 'When did you come to Ifakara?' by saying, 'I followed my husband after he was posted here'.¹⁶

Though the government embarked on training older women, attending home deliveries proved difficult because of poor transportation and communication networks. Further, it was never easy to get these older women to train. Perhaps this was seen as interfering with the duties of the traditional midwives. In some areas, like Iringa, training village midwives was abandoned as early as 1962, partly because there were no available women to train (Tanganyika Ministry of Health 1962:32). In addition, there were not many trained village midwives, and they first had to handle the demands of the health facilities before domestic services (Tanganyika Ministry of Health and Labour 1961:5).

In addition, midwifery was a no-go zone for men, a facsimile of the situation in colonial times (Kanogo 2005:171). Machado shows that African women in Dar es Salaam refused to attend clinics and decided to give birth

at home, however 'life-threatening' it was, if the delivery was going to be managed by a man. The newspaper read, '*Wanawake hawataki kupekuliwa na wanaume*' (Women do not want to be inspected by men) (Machado 1950:12). Therefore, to cover the demand for MCH, each of the regions in Tanzania was to have an MCH aide school offering eighteen months of training to selected women whose qualification was a primary school certificate. After the training, MCH aides were posted in dispensaries and RHCs (Gish 1975:13). According to Titmuss *et al.* (1964), the demand for MCH services contributed to the growth of RHCs. However, the relationship between the RHCs and the demand for MCH was symbiotic, such that the availability of these centres also attracted women to seek services. Otherwise, long distances were a major hindrance to accessing a medical facility, with some women having to walk almost 26 kilometres (16 miles) to access MCH services (Tanganyika Ministry of Health 1963:2; Gish and Walker 1978).

To keep up with the demand, many RHCs and dispensaries were built. However, because the construction of the facilities was done in haste, ostensibly to supply every village, quality was compromised in the process. Most of these dispensaries and health centres did not have staff, drugs and equipment. Also, the expansion went hand in hand with the construction of big zonal and regional hospitals. These were capital-intensive projects that led to excessive borrowing. The reliance on external experts, loans and grants (The Standard 1966a:1, 5), particularly for MCH, was immense, and although it seemed as though the benefits were free of cost, they resulted in debts (Ayoade 1988:104). Secondly, these big hospitals were erected in urban areas, even though, according to Nyerere, Tanzania was 'aiming at the village while the others were aiming at the moon' (Nyerere 1973:5). The construction of these hospitals meant that the government was still concentrating on a curative rather than a preventive health system (Segall 1972).

The inequities described above explain why the RHCs and dispensaries had to do most of the MCH work in the rural areas. The role of the midwives in these facilities was to organise postnatal, antenatal and family planning, nutritional education and school health and the health of children below the age of five. Some of these procedures involved vaccination. With the help of UNICEF, child vaccination procedures were carried out against whooping cough, diphtheria and tetanus (Tanganyika Ministry of Health and Labour 1961:9). Though vaccination was recorded as popular and already accepted, there were cases where mothers refused to have their children vaccinated, and worse still, others did not complete the required dose, leading

to wastage (Tanganyika Ministry of Health and Labour 1961:10). In addition, the availability and efficacy of vaccines was dependent on storage, which was lacking. Only a few hospitals and health centres had kerosene refrigerators, which were difficult to maintain and broke down easily.¹⁷ This was characteristic of many former colonies, including francophone regions like Senegal (Keita 2007) and Belgian Congo (Hunt 1988). Even basic equipment in MCH kits, such as syringes, weighing scales, sterilisers, blood pressure pumps and needles, were not readily available, and, in most cases, the facilities relied on aid (Hart 1978:7).

The policy of handling more complicated maternal health cases was not friendly. A case too complex for an RHC was referred to the nearby district hospital and then the regional hospital, after which the case would be taken to Dar es Salaam. The nature of the case, which was often treated as an emergency, did not allow for such bureaucracy, given the major infrastructural problems that existed. There were no ambulances in the rural areas, except for the few Land Rovers that were part of the UNICEF aid given to support mobile clinics (Tanganyika Ministry of Health and Labour 1961:12). The use of mobile clinics for MCH was problematic: there were too few vehicles, fuel was lacking, the poor roads led to constant breakdown (Ngurumo 1965:3) and, in some cases, women in labour were carried on bicycles (Stirling 1977:92). Retired nurses in Ifakara also recalled having to trek long hours to the villages but these mobile clinics could not reach everyone.¹⁸

In addition, the MCH programme was poorly planned, such that clinic sessions for mothers, for child immunisation, for sick mothers, for sick children and for family planning were all held on different days, which made it difficult for mothers to attend. Even a woman who was not employed could not keep up with these trips, not to mention pregnant women, working women and rural women who had farming or other work to do (Hart 1978:8). This necessitated a harmonisation of these services by 1978.

In the villages, TANU, as already noted, was active in popularising health policies. For instance, TANU women advocated for better hygiene, childcare and nutritional practices through music and clubs (Titmuss *et al.* 1964:53; Geiger 1997:65).¹⁹ Women organised themselves into groups, primarily according to regions. In Morogoro, for instance, women carried out different activities, such as farming, tailoring, knitting, reading, writing and artwork, such as mat-making (Geoghegan 1965:38). A particular group of women in Kilosa, Morogoro, met three times a week to discuss matters concerning womenfolk, hygiene and agriculture (The

Standard, 17 January 1966:19). At these meetings, women were taught how to take care of the family and young children. These meetings were given a boost by the emphasis on primary healthcare, through campaigns such as *Mtu ni Afya* (Man is Health) and *Chakula ni Uhai* (Food is life) in the 1970s (Budd 1978:46). In these campaigns, TANU leaders became campaign group leaders. Budd states that these campaigns would not have succeeded without the Party, pointing out that the main reason previous campaigns failed was because they were disconnected from TANU's politics (Budd 1978:28).

In these meetings, however, colonial policies and medical missionary practices continued. For example, there was the 'president's bounty' for any woman who gave birth to triplets (NRC,²⁰ M.15/530 1966; *The Standard* 27 January 1966:2). In colonial days, this was referred to as the 'Governor's Bounty' (NRC, M.1/15/46 1960). The reason for the bounty in Tanzania is not clear, but, as in other parts of the continent, such rewards were meant to discourage the taboo and killing of twins or triplets. After independence, the bounty may have been used to popularise the presidency. TANU remained at the centre with its political education department, playing a key role in publicising both political and other matters to the society.

In this way, the overall acceptance of policies was also influenced by social, economic, environmental and political factors. Events and subsequent societal changes played a significant role in shaping social policies. For instance, periodic famines in certain parts of Tanzania affected nutrition in those regions. This highlighted the importance of providing nutritional education to mothers, addressing not only food availability but also social and cultural practices. Additionally, even in regions with abundant food, like Kilombero in the Rufiji Basin, malnutrition remained prevalent because of traditional customs that restricted women from consuming protein-rich foods (Ngurumo 1970:2). Lack of nutritional knowledge led to the continued consumption of less nutritious staples, such as cassava and rice (Meredeth 1977:23).

It was noted in the Rufiji Basin report that consumption of goat or chicken occurred only on special occasions because these animals were usually kept for sale (MOH 1960:3). The report added that people were also not fond of eating eggs or drinking milk. Furthermore, vegetables like green leaves and pumpkins were not popular, and fruits – mostly mangoes or oranges – were eaten only in their season. Mothers did not have enough milk to breastfeed their babies, causing them to feed their infants with porridge on the second day after birth (MOH 1960:12). Therefore, health education was deemed necessary. However, the approaches were

similar to those of colonial times. Mama Maria Nyerere, the first lady, initiated a programme of giving powdered milk to women and their children (The Standard 23 February 1966:3). The initiative also aimed to educate parents on proper child upbringing, expanding MCH facilities and launching campaigns against diseases that posed a significant threat to MCH (Titmuss *et al.* 1964:79).

Health education was intensified, and as early as 1963, a standardised health education teaching kit was put together (Tanganyika Ministry of Health 1963:31). The teaching kit included visual aids, charts, posters, leaflets and scripts for broadcasting health programmes. In addition, seminars for government and private organisations were held. There was also a radio broadcast, dubbed 'Freedom from Hunger Week', in 1963 (Tanganyika Ministry of Health and Labour 1961:5). Similar approaches continued in the 1970s, with campaigns such as *Mtu ni Afya* (Budd 1978). In this campaign, the ministries of agriculture, health and education collaborated to promote better nutrition. Various seminars were held, including international cooperation with FAO and UNICEF to present a series of national nutrition seminars (Tanganyika Ministry of Health 1961:5), the UNICEF seminar on the problems of obstetrics and the newborn, and the Sixth International Nutrition Congress in Edinburgh in 1963 (Tanganyika Ministry of Health 1961:6). The main concern was to reduce maternal and infant mortality and educate people on better health and nutritional practices, mainly preventive. However, after the seminars, implementation was problematic because Tanzania's economy could not support an overhaul of the system from curative to preventive.

Were MCH services better in urban areas such as Dar es Salaam, Arusha and Tanga? In 1961, Sewa Haji Hospital was closed after the completion of the 230-bed third ward block at Muhimbili. However, the Muhimbili maternity section had only fifty beds and forty-two baby cots. The 1961 Annual Report of the Health Division shows that there were ten deliveries per day in this facility, excluding abortions (Tanganyika Ministry of Health and Labour 1961:31). Even though a separate obstetrics section was opened at Muhimbili, it could not handle all the maternity cases. For instance, matters to do with infertility were considered not to be urgent and were put on the waiting list, which is said to have 'lengthened rapidly' (Tanganyika Ministry of Health and Labour 1961:31). As a result, Ocean Road Hospital was mandated to cater for maternity cases. All the general beds were replaced with maternity beds, and by 1961, Ocean Road Hospital had 116 maternity beds (Tanganyika Ministry of Health 1961:1). By 1962, this capacity was increased to 122. However, the pressure was still too great and, therefore,

mothers who had normal deliveries were discharged within twenty-four hours to create space for others, a situation which was worsened by the shortage of staff.

Thus, maternal health conditions in the urban areas were not any better, especially for the poor. Despite the increase in services and the recorded decrease in maternal and infant mortality, as per the statistics, the situation was challenging. The government could not handle all medical matters alone, and so voluntary agencies were brought in. Even if the government had 'planned' to disregard the services of voluntary agencies by replacing them with government facilities, it soon realised that this was impossible. The government changed its strategy by cooperating with the voluntary agencies and giving them either grants or staff. It requested certain voluntary agencies to turn their hospitals into designated district hospitals (DDH), which many voluntary agencies did. The problem was that there was no formal cooperation between the government and voluntary agencies (Jennings 2016:207), a problem that had started in the colonial days, making it difficult to coordinate MCH and other services in the postcolonial era.

Conclusion

The article has discussed how the process of making and implementing policies is a complex venture influenced by a constellation of factors. In the early years of Tanzania's independence, the pressure and triumph of independence were quickly tested through the making and implementation of policies. In the health sector, Tanzania inherited a health system that mimicked and retained elements of colonial policy. In the bid to improve, healthcare policy planning encountered stormy realities. Colonial policies continued, and policymaking remained difficult. By the mid-1960s, despite the progress that had been made, the health sector was still challenged by, among other things, inflation, a rising population and a weak economy. Tanzania continued with the colonial model that largely emphasised modernisation, which often led to dependency and underdevelopment.

The development plan of 1961–1963 reflected the principles of the World Bank. The questions of sovereignty and self-reliance were glaring as early as 1962 because, on many occasions, Tanzania had to retain expatriates for technical and managerial support. Maternal health was no exception. Coupled with a lack of equipment and medical facilities, medical pluralism was practised in that most women sought help from traditional midwives. However, the government embarked on an expansionist policy to build hospitals, RHCs and dispensaries. Unfortunately, this led to financial strain, overreliance on foreign aid, and excessive borrowing.

TANU was at the centre of policymaking and implementation. With TANU women and the Youth League, maternal and health policies were popularised among the masses. However, being the only ruling party, the TANU government had no watchdog, and so policy flaws were inevitable. The medical sector, though expanded, faced many challenges. Indeed, as in many other countries in Africa, postcolonial medical plans and challenges were indicative of the colonial agenda.

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Notes

1. Though the term Tanzania is used, the article is concerned with only the mainland and the name Tanganyika is used where necessary.
2. The population question was the fear that the world's population was on the decline. In Africa, this concern was a real problem in the first decades of the twentieth century, when the population was decimated by wars of conquest, diseases and injuries.
3. TNA as used in the references stands for Tanzania National Archives in Dar es Salaam.
4. Interview, Zuhura Said, 21.9.2023, Lipangalala, Ifakara.
5. Interview, Margaret Kindasi, 25.9.2023, Kibaoni, Ifakara.
6. Oral interviews with Margaret Kindasi, who upgraded from a certificate in nursing assistant to diploma, 25.9.2023, Kibaoni, Ifakara; Leah Mpombo, who upgraded from MCHA to Public Health Aide, then later to a Diploma in Nursing, 25.9.2023, Uwanja wa Ndege, Ifakara; Dr Eliasante Mchomvu, who progressed from Clinical Officer to AMO; interviewed 23.9.2023, Viwanja sitini, Ifakara.
7. In July 1961, Prof. Titmuss, a welfare expert in Britain, was requested by the then Minister of Health in Tanganyika, Mr Bryceson, to review of the medical services in Tanganyika. With his team, Titmuss compiled a report called 'The Health Services of Tanganyika', or simply 'The Titmuss Report'.
8. Interview, George Mwambeta, 19.9.2023, Viwanja Sitini, Ifakara.
9. In this context, it loosely translates to demonstrations, meaning party activities but not protests.

10. Interview with Ephrasia Melowi, 27.9.2023), Ephrasia Melowi interviewed on 2.10.2023, Kidatu.
11. *Bwana Afya* and *Bi Afya* (male and female) were auxiliary health officers, mostly working among the people in preventive health.
12. Interviewee A, 19.9.2023, Viwanja Sitini, Ifakara.
13. *Shamba la Kijiji* (communal land); *Mfumaki* means Mfuko wa Maendeleo ya Kijiji (Village Development Fund).
14. Interview, Zuhura Said, 21.9.2023, Lipangalala, Ifakara.
15. What Zuhura meant was that home delivery accommodated African culture. The belief was that a husband may look for another partner during the period of seclusion after birth which would result in the baby contracting *kilala*. *Kilala* was a condition that led to delayed milestones. Administration of *kilala* was the reason why many women continued to seek the services of traditional midwives because such rituals were prohibited in hospitals. (For further details on this subject, including other rituals and the role of age in traditional midwifery, please see a forthcoming paper, “Change and Continuity in the Concept of Seniority in Midwifery in Kilombero, Tanzania” by Veronica Kimani and Ulrike Lindner, currently under review by the *Nordic Journal of African Studies*.)
16. Interviews with Leah Mpombo, 25.9.2023, Uwanja wa Ndege, Ifakara, and Christina Isakwisa, 20.9.2023, Viwanja sitini, Ifakara.
17. Interview, Margaret Kindasi, 25.9.2023, Kibaoni, Ifakara.
18. Interview, Christina Isakwisa, 20.9.2023, Viwanja sitini, Ifakara.
19. FGD with Theresia Tamayamali, Zuhura Said, Alice Fande, Hamisi Kulengama, 21.9.2023, Lipangalala, Ifakara.
20. NRC is the National Record Centre in Dodoma.

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