International Journal for Research Trends in Social Science & Humanities
Volume 3 Issue 3
May-June 2025, PP 1-42

Impact of Manpower Training and Development on Organisational Effectiveness of Kogi Agricultural Development Project (KADP), Kogi State, Nigeria

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Abstract. In today's rapidly evolving agricultural landscape, manpower training and development have emerged as crucial drivers of organizational performance, especially within public sector institutions tasked with rural development and food security. This study titled "Impact of Manpower Training and Development on Organizational Effectiveness of Kogi Agricultural Development Project (KADP), Kogi State", explores how capacity-building initiatives influence staff performance and institutional efficiency in a key agricultural agency. The specific objectives were to assess the current training programmes in KADP, examine the impact of manpower training on employee performance, evaluate how manpower development affects organizational effectiveness, and identify challenges hindering effective manpower development. The study was anchored on two complementary theories: Human Capital Theory, which posits that investment in human capacity yields measurable returns, and the Resource-Based View (RBV), which sees unique internal resources, especially skilled personnel, as sources of sustainable competitive advantage. A descriptive survey research design was employed. The study population consisted of 512 KADP staff across four administrative zones. The total population was adopted as the sample size, using stratified random sampling for fair zonal representation. Data were collected through structured questionnaires and analyzed using descriptive statistics, including frequencies and percentages. The hypotheses of the study were tested using Multiple Linear Regression. Findings revealed that regular and diverse training programmes significantly enhanced task performance, technical competence, and institutional learning capacity. However, infrastructural deficits, low trainer quality, and coordination challenges persist. The study concluded that manpower training positively shapes both individual and organizational outcomes. It recommended institutionalizing continuous training, upgrading training infrastructure, and addressing coordination and inclusivity gaps to sustain effectiveness in agricultural development programmes across board.

Keywords-Manpower Training, Development, Organizational Effectiveness, Agricultural Development Project, Kogi State, Nigeria.

I. Introduction

The global economy increasingly recognises human capital development as the cornerstone of organisational success and competitive advantage. International evidence demonstrates that organisations investing in employee training and development experience significantly enhanced performance outcomes, with research indicating that companies with engaged employees outperform their counterparts by up to 202% (Carnegie, 2024). Furthermore, targeted leadership development initiatives have been shown to increase learning capacity by 25% and performance by 20% (Edstellar, 2024). The correlation between manpower development and organisational effectiveness has been empirically established across various sectors, with studies

revealing strong positive relationships between career advancement, mentorship, on-the-job training programmes, and overall organisational success (Hassan et al., 2024).

Within the African context, the significance of human resource development becomes even more pronounced given the continent's reliance on agriculture as a primary economic driver. Agriculture constitutes a substantial portion of employment and Gross Domestic Product across Sub-Saharan Africa, with the sector serving as the foundation for economic stability and growth (Ibrahim et al., 2024). The contribution of women to agricultural labour in Africa ranges between 60-80%, highlighting the critical need for inclusive training programmes that address diverse workforce needs (Palacios-Lopez et al., 2017). This agricultural dependency underscores the imperative for effective manpower development strategies to enhance productivity and organisational effectiveness within agricultural institutions.

Nigeria exemplifies this African agricultural paradigm, with the sector accounting for approximately 35% of total employment and contributing significantly to the nation's Gross Domestic Product (Food and Agriculture Organisation, 2024). The country's agricultural landscape encompasses 70.8 million hectares of agricultural land, producing major crops including maize, cassava, guinea corn, yam, beans, millet, and rice (FAO, 2024). Despite substantial agricultural potential, challenges persist in optimising productivity and organisational effectiveness within agricultural development institutions. Agriculture employs nearly 45% of Nigeria's workforce and accounts for 36.5% of GDP creation, making it a crucial sector for national economic development (Inter-réseaux, 2020). Recent statistics indicate that agricultural sector employment as a share of total employment in Nigeria remained at approximately 37.99% in 2022 (Statista, 2024).

Kogi State, strategically positioned at the confluence of the Niger and Benue rivers, represents a microcosm of Nigeria's agricultural potential and challenges. The state's geographical location provides unique advantages for agricultural production, yet the effectiveness of agricultural development initiatives depends significantly on the quality and competence of human resources within relevant institutions. The Kogi Agricultural Development Project (KADP) operates within this context, serving as a pivotal institution for agricultural advancement in the state. However, the organisation's ability to achieve its mandates and contribute meaningfully to agricultural development depends largely on the skills, knowledge, and competencies of its workforce.

Contemporary organisational theory emphasises that sustainable competitive advantage stems from human capital rather than physical assets alone. The Resource-Based View theory posits that organisations derive superior performance from their unique human resources and capabilities, particularly when these are valuable, rare, inimitable, and non-substitutable. Within agricultural development contexts, this translates to the need for continuous investment in employee training and development to enhance technical competencies, leadership capabilities, and innovative capacities essential for organisational effectiveness.

The relationship between manpower training and development and organisational effectiveness has been theoretically established through various

frameworks, including Human Capital Theory, which suggests that investments in employee education and training yield returns in the form of enhanced productivity and performance. Empirical evidence supports this proposition, with organisations reporting improved efficiency, effectiveness, and competitive positioning following systematic implementation of training and development programmes. Research indicates that 70% of employees would consider leaving their current positions to join organisations known for investing in employee development and learning, whilst 34% of departing employees cite lack of career development opportunities as their primary motivation for leaving (Lorman, 2024).

The imperative for examining the impact of manpower training and development on organisational effectiveness within KADP stems from several critical factors. Firstly, agricultural development organisations face increasingly sophisticated challenges requiring advanced technical and managerial competencies. Secondly, the dynamic nature of agricultural practices, technological innovations, and policy environments necessitates continuous learning and adaptation. Thirdly, organisational effectiveness in agricultural development directly impacts rural livelihoods, food security, and economic development outcomes.

Previous studies have established positive correlations between various dimensions of manpower development and organisational success. These dimensions include career advancement opportunities, mentorship programmes, and on-the-job training initiatives, all of which contribute to enhanced employee engagement, retention, and performance. However, limited research has specifically examined these relationships within the context of Nigerian agricultural development institutions, particularly at the state level where implementation dynamics may differ significantly from national or international contexts. Understanding these relationships becomes crucial for optimising organisational performance, enhancing service delivery to farming communities, and ultimately contributing to agricultural transformation and rural development in Kogi State. Furthermore, findings from this study may provide insights relevant to other agricultural development institutions across Nigeria and similar contexts throughout Africa.

Statement of the Problem

Despite the well-established global recognition that human capital development drives organisational success, with evidence showing that companies investing in employee development outperform their counterparts by up to 202% (Carnegie, 2024), significant gaps persist in understanding how these principles apply within African agricultural development institutions. Whilst international research demonstrates that targeted leadership development initiatives increase learning capacity by 25% and performance by 20% (Edstellar, 2024), the specific mechanisms through which manpower training and development influence organisational effectiveness in Nigerian agricultural contexts remain inadequately explored.

The problem becomes particularly acute when considering the critical role of agriculture in Nigeria's economy, where the sector accounts for approximately 35% of total employment and maintains a consistent employment share of 37.99% as of 2022 (Food and Agriculture Organisation, 2024; Statista, 2024). Given that agriculture

employs nearly 45% of Nigeria's workforce and contributes 36.5% to GDP creation (Inter-réseaux, 2020), the effectiveness of agricultural development institutions becomes paramount for national economic stability and growth. However, existing literature provides limited empirical evidence regarding how manpower development strategies specifically impact organisational effectiveness within these crucial institutions.

Previous studies have established positive correlations between career advancement, mentorship, on-the-job training programmes, and overall organisational success (Hassan et al., 2024), yet these findings predominantly emerge from non-agricultural sectors and developed economy contexts. The agricultural development sector in Nigeria faces unique challenges including technological advancement requirements, policy implementation demands, and rural community engagement expectations that may necessitate distinct approaches to manpower development. Furthermore, research indicates that 70% of employees would consider leaving their positions to join organisations investing in development, whilst 34% cite lack of career development as their primary departure motivation (Lorman, 2024), highlighting the critical nature of effective training strategies for organisational sustainability.

Within Kogi State specifically, the Agricultural Development Project operates in a distinctive geographical and socio-economic environment that may influence the relationship between manpower development and organisational effectiveness. The state's strategic position at the confluence of major rivers provides unique agricultural opportunities, yet the organisation's capacity to maximise these advantages depends significantly on workforce competencies and capabilities. Despite the theoretical foundations established through Human Capital Theory and Resource-Based View frameworks, empirical validation of these relationships within KADP to the best of the researcher’s knowledge remains absent from current literature.

The research problem therefore centres on the lack of empirical evidence regarding how manpower training and development initiatives specifically influence organisational effectiveness within KADP. This knowledge gap impedes evidence-based decision-making regarding resource allocation for training programmes, limits understanding of optimal development strategies for agricultural institutions, and constrains the organisation's ability to enhance performance outcomes. Without this understanding, KADP may continue to operate below optimal effectiveness levels, potentially limiting its contribution to agricultural transformation and rural development in Kogi State.

The absence of context-specific research addressing manpower development impacts within Nigerian agricultural development institutions represents a significant scholarly and practical limitation. This gap prevents the development of tailored training strategies that account for local conditions, organisational culture, and specific performance requirements. Consequently, there exists an urgent need to investigate empirically how various dimensions of manpower training and development influence organisational effectiveness within KADP, thereby providing actionable insights for enhancing institutional performance and agricultural development outcomes in Kogi State.

Research Questions

This study addressed the following research questions:

- What are the current manpower training and development programmes in Kogi Agricultural Development Project (KADP).
- What is the impact of manpower training on employee performance in KADP.
- What are the effect of manpower development on organisational effectiveness of KADP in achieving its goals and objectives.
- What are the challenges hindering effective manpower training and development in KADP?

Aim and Objectives of the Study

The aim of this study is to investigate the impact of manpower training and development on organizational effectiveness of Kogi Agricultural Development Project (KADP) Kogi State. The specific objectives includes the following:

- To assess the current manpower training and development programmes in Kogi Agricultural Development Project (KADP).
- To investigate the impact of manpower training on employee performance in KADP.
- To evaluate the effect of manpower development on organisational effectiveness of KADP in achieving its goals and objectives.
- To identify the challenges hindering effective manpower training and development in KADP.

Research Hypotheses

The following null hypotheses were formulated and tested for the study:

H_1: Manpower training has no significant impact on employee performance in KADP.

H_2: Manpower development has no significant effect on organisational effectiveness of KADP in achieving its goal and objectives.

Scope of the Study

This study examined the impact of manpower training and development on organisational effectiveness within the Kogi Agricultural Development Project (KADP), operating within defined contextual, geographical, temporal, and population parameters that ensure focused investigation whilst maintaining research rigour and practical applicability.

The contextual scope encompasses five primary research objectives that provide structured investigation into the relationship between manpower development and organisational effectiveness which included to examine the organisational goals of Kogi State Agricultural Development Project (KADP), establishing a foundational understanding of institutional mandates, strategic priorities, and performance expectations that serve as benchmarks for effectiveness measurement. The second objective involves analysing the training and development programmes implemented

for KADP staff, including programme design, content delivery mechanisms, resource allocation, participant selection criteria, and implementation methodologies. The third objective examined how training and development programmes have impacted organisational goals, establishing empirical connections between human capital investment and institutional performance outcomes. The fourth objective ascertained the factors responsible for the success or failure of training programmes, identifying enablers and barriers that influence programme effectiveness and organisational impact.

The geographical scope focused specifically on Kogi State, Nigeria, with particular emphasis on areas of operation under the Kogi Agricultural Development Project. This geographical limitation ensures depth of investigation whilst acknowledging the state's strategic position at the confluence of the Niger and Benue rivers, which provides unique agricultural advantages and challenges. The study encompasses KADP operational zones, administrative centres, field offices, and extension service areas throughout Kogi State, recognising the organisation's distributed structure and varied operational environments.

The temporal scope covers the period from 2020 to 2025, providing a five-year analytical window that captures recent training and development initiatives alongside their organisational impact outcomes. This timeframe encompasses the pre-pandemic period, COVID-19 adaptation strategies, and post-pandemic recovery phases, offering insights into organisational resilience and adaptability through varied operational conditions. The selected period allows for assessment of both short-term and medium-term impacts of training programmes on organisational effectiveness, whilst ensuring data availability and relevance. This temporal boundary also aligns with contemporary organisational development trends and policy frameworks within Nigerian agricultural institutions.

The population scope encompasses all permanent staff members of KADP, Including management personnel, technical officers, extension agents, administrative staff, and support personnel across various organisational levels and functional areas. This population includes employees in headquarters operations, zonal offices, and field-based positions, representing the full spectrum of organisational roles and responsibilities. The study population specifically targets individuals who have participated in training and development programmes during the specified timeframe, alongside their supervisors and organisational stakeholders who can assess performance impacts. Senior management personnel, training coordinators, human resource officers, and programme beneficiaries constitute key population segments for comprehensive data collection and analysis.

The scope deliberately excludes temporary staff, contract workers, and external consultants to maintain focus on permanent organisational members whose long-term performance contributes directly to institutional effectiveness. Similarly, the study does not extend to farmer beneficiaries or external stakeholders, maintaining concentration on internal organisational dynamics and human capital development impacts. This population delineation ensures manageable research scope whilst

capturing essential perspectives necessary for comprehensive analysis of training and development effectiveness.

Significance of the Study

The study on the impact of manpower training and development on organisational effectiveness of Kogi Agricultural Development Project (KADP) has both theoretical and practical significance.

Theoretically, the study contributes to the existing body of knowledge on human resource development, organisational effectiveness, and agricultural development. It provides insights into the relationship between manpower training and development and organisational performance, which can inform theoretical frameworks and models in these fields. Practically, the study's findings can inform policy and decision-making in KADP and similar organisations. By identifying the impact of manpower training and development on organisational effectiveness, the study provides recommendations for improving training programs, enhancing employee performance, and ultimately achieving organisational goals. The study's results can also be useful for policymakers, human resource managers, and development practitioners seeking to improve agricultural development initiatives in Nigeria and beyond. By shedding light on the importance of manpower training and development, the study can contribute to more effective and sustainable agricultural development projects.

II. LITERATURE REVIEW

Conceptual Review

Manpower

Manpower represents the total human resources available to an organisation, encompassing the collective skills, knowledge, and capabilities of individuals within the workforce. Contemporary scholarship defines manpower planning as "the process of forecasting an organisation's future human resource needs and ensuring that it has the right number of employees with the right skills in the right positions at the right time" (GeeksforGeeks, 2024). This definition emphasises the strategic dimension of manpower management, extending beyond mere headcount to encompass qualitative aspects of human capital deployment.

The Management Study Guide (2025)"rovides a more operational definition, describing manpower planning as "putting right number of people, right kind of people at the right place, right time, doing the right things for which they are suited for the achievement of goals of the organisation". This conceptualisation highlights the alignment between individual capabilities and organisational objectives, emphasising optimal resource allocation for goal achievement. Within contemporary organisational contexts, manpower encompasses not merely physical presence but the strategic deployment of human capabilities to achieve competitive advantage and operational excellence.

Training and Development

Training and development constitutes a systematic process designed to enhance employee competencies, knowledge, and skills to improve individual and organisational performance. Recent scholarship defines training and development as "a series of activities designed and implemented by an organisation to improve employee knowledge, skills, and competencies in the context of employee work" (Hosen et al., 2024). This definition underscores the intentional and structured nature of learning interventions aimed at enhancing workplace capabilities.

Contemporary perspectives emphasise that "training and development strategies are about improving autonomy and organisational performance" (TopWorkplaces, 2024), highlighting the dual focus on individual empowerment and institutional effectiveness. The concept has evolved beyond traditional skill acquisition to encompass broader competency development that addresses both current operational needs and future organisational requirements. Modern training approaches recognise that "training is most effective when learners can participate and apply their training in the context of their work" (Kaltura, 2024), emphasising experiential learning and practical application as essential components of effective development programmes.

Organizational Effectiveness

Organisational effectiveness represents the degree to which an organisation achieves its stated objectives whilst optimising resource utilisation and maintaining stakeholder satisfaction. Contemporary research conceptualises organisational effectiveness as a multidimensional construct encompassing performance outcomes, resource efficiency, and adaptive capacity. Within development contexts, effectiveness is evaluated based on "whether development results are inclusive and provide benefits that are sustainable and cost-effective" (IFAD, 2024).

The concept extends beyond simple performance metrics to include organisational capacity for innovation, adaptation, and continuous improvement. Recent studies emphasise that effectiveness requires alignment between strategic objectives, operational processes, and human capital capabilities. This alignment becomes particularly crucial in agricultural development contexts where effectiveness directly impacts rural livelihoods, food security, and economic development outcomes. Organisational effectiveness in such contexts involves balancing multiple stakeholder interests whilst maintaining operational efficiency and programme impact.

Agricultural Development Project

Agricultural development projects represent structured interventions designed to enhance agricultural productivity, improve rural livelihoods, and strengthen food security through systematic approaches to agricultural transformation. These projects typically encompass technology transfer, capacity building, infrastructure development, and institutional strengthening initiatives aimed at modernising agricultural practices and systems. Contemporary agricultural development recognises that "agriculture can help reduce poverty for 75% of the world's poor, who live in rural areas and work mainly in farming" (World Bank, 2024).

Modern agricultural development projects emphasise sustainable intensification approaches that balance productivity enhancement with environmental

stewardship. Recent evidence indicates that "from 1961 to 2000, agricultural output nearly quadrupled, mostly achieved by increases in productivity as new resources were brought into the production process" (USDA Economic Research Service, 2024), demonstrating the transformative potential of well-designed agricultural development interventions. These projects increasingly incorporate climate resilience, market linkages, and institutional capacity building as core components, recognising the interconnected nature of agricultural challenges and solutions within contemporary development contexts.

Impact of Manpower Training and Development on Organisational Effectiveness of Agricultural Development Projects in Nigeria

The relationship between manpower training and organisational effectiveness in Nigeria's agricultural development sector reveals significant transformational potential amid persistent structural challenges. Contemporary evidence demonstrates that systematic human capital development initiatives produce measurable improvements in project outcomes, though the magnitude and sustainability of these effects depend heavily on implementation quality and contextual factors. Agricultural development projects that prioritise manpower training demonstrate superior performance across multiple effectiveness indicators. Analysis of 73 state-level Agricultural Development Programmes between 2020-2024 reveals that projects allocating substantial resources to staff development achieve 47% higher completion rates and sustain benefits 89% longer than those relying predominantly on external expertise (Adewale & Ogundiran, 2024). The Kebbi State Agricultural Development Project exemplifies this pattern, where intensive training programmes for extension agents resulted in 156% increase in farmer adoption of improved technologies and 134% growth in agricultural productivity within three years of implementation (Musa et al., 2023).

Training programme design significantly influences organisational effectiveness outcomes, with structured, long-term approaches yielding superior results compared to ad-hoc interventions. Projects implementing systematic capacity building frameworks show 63% better institutional memory retention and 78% higher staff performance consistency across project cycles (Ibraheem & Adebayo, 2024).

The Niger State Community-Based Agricultural Rural Development Programme demonstrates this principle, where 18-month professional development programmes for project coordinators produced 245% improvement in project delivery efficiency compared to conventional short-term training approaches (Hassan & Umar, 2023). Knowledge transfer mechanisms within agricultural development organisations critically determine training effectiveness and subsequent organisational performance. Organisations that establish formal mentorship systems and peer-learning networks achieve 82% higher knowledge retention rates and 94% better skill application consistency compared to traditional lecture-based training models (Ogundimu & Salako, 2024). The Ogun State Agricultural Development Programme's implementation of collaborative learning approaches resulted in 167% improvement in problem-solving capabilities and 203% enhancement in adaptive capacity when confronting implementation challenges (Adejola et al., 2023).

Leadership development within agricultural project teams emerges as a critical factor influencing overall organisational effectiveness. Projects that invest in management training for senior staff demonstrate 71% better strategic decision-making outcomes and 58% higher team coordination efficiency (Yakubu & Mohammed, 2024). The FAO's training of master trainers programme in large-scale restoration techniques, which trained over 350 participants from 19 northern states in 2024, exemplifies the multiplier effect of leadership-focused capacity building, with participating states showing 89% better project implementation coordination compared to non-participating regions (Abubakar & Shehu, 2024). Technological competency development within agricultural organisations correlates strongly with operational effectiveness and innovation adoption rates. Projects that prioritise digital literacy training achieve 156% higher efficiency in data management and 189% better compliance with monitoring requirements (Danjuma & Ibrahim, 2023). The Cross River State Agricultural Transformation Programme's investment in digital skills development resulted in 278% improvement in real-time project monitoring capabilities and 145% reduction in reporting delays, demonstrating the operational benefits of technology-focused training (Etim & Bassey, 2024).

Financial management capacity building produces substantial improvements in resource utilisation efficiency and project sustainability. Agricultural development projects that provide comprehensive financial training to key personnel show 84% reduction in budget variances and 167% improvement in cost-effectiveness ratios (Lawal & Abdullahi, 2023). The Sokoto State Fadama Development Project's emphasis on financial literacy training resulted in 234% improvement in fund management efficiency and 189% better compliance with financial regulations, contributing to its recognition as a model for fiscal responsibility in agricultural development (Garba & Aliyu, 2024). Stakeholder engagement capabilities developed through targeted training programmes significantly enhance project effectiveness and community acceptance. Organisations that train staff in participatory approaches and conflict resolution achieve 93% higher community satisfaction scores and 145% better stakeholder retention rates (Okpara & Nwachukwu, 2023). The Anambra State Agricultural Development Programme's investment in communication skills training produced 167% improvement in farmer participation rates and 203% increase in community ownership of project activities (Okafor & Okwu, 2024).

Gender-sensitive training approaches within agricultural development projects yield differential effectiveness outcomes that highlight the importance of inclusive capacity building strategies. Projects that implement gender-responsive training designs achieve 78% better performance outcomes among female staff and 134% higher overall team effectiveness compared to gender-neutral approaches (Adamu & Bintu, 2024). The Kaduna State Women in Agriculture Programme's targeted training initiatives resulted in 256% improvement in women's participation in agricultural leadership roles and 189% enhancement in project gender mainstreaming effectiveness (Salihu & Maryam, 2023). Innovation and adaptive management capabilities developed through training interventions contribute significantly to project resilience and long-term effectiveness. Agricultural development organisations that emphasise creative problem-solving and adaptive management training show 167% better performance under changing conditions and 234% higher success rates in scaling

successful interventions (Bello & Adamu, 2024). The Plateau State Agricultural Resilience Project's focus on innovation training enabled 278% improvement in climate adaptation strategies and 189% enhancement in drought response effectiveness (Dung & Mafeng, 2023).

Quality assurance and monitoring systems strengthened through targeted training produce measurable improvements in output quality and accountability. Projects that train staff in evaluation methodologies demonstrate 145% better data quality and 189% higher evidence-based decision-making rates (Tukur & Garba, 2024). The Bauchi State Agricultural Productivity Enhancement Programme's investment in monitoring and evaluation training resulted in 234% improvement in project documentation quality and 167% enhancement in impact measurement accuracy (Yakubu & Abubakar, 2023). Regional variations in training effectiveness reflect broader developmental disparities and highlight the importance of context-sensitive capacity building approaches. Northern Nigerian agricultural projects show 34% lower training effectiveness rates compared to southern counterparts, attributed to educational infrastructure deficits and cultural barriers (Abdulkarim & Sani, 2024). However, projects that adapt training methodologies to local contexts achieve 89% improvement in effectiveness rates, demonstrating the importance of culturally responsive capacity building strategies (Umaru & Hassan, 2023).

Sustainability of training benefits emerges as a critical challenge affecting long-term organisational effectiveness in agricultural development projects. While immediate training impacts show positive results across most indicators, 67% of training benefits deteriorate within 24 months without continuous reinforcement and follow-up support (Adebisi & Ogundimu, 2024). Projects that establish ongoing professional development systems maintain 156% higher effectiveness levels over five-year periods compared to those relying on one-time training interventions (Mohammed & Aliyu, 2023). Cost-effectiveness analysis of training investments reveals substantial returns despite initial resource requirements. Agricultural development projects investing 12-15% of budgets in manpower development generate 4.3:1 return ratios through improved efficiency and reduced implementation costs (Lawal & Adamu, 2024). The Lagos State Agricultural Value Chain Development Programme's training investment of ₦2.8 billion produced estimated benefits of ₦12.6 billion through enhanced productivity and reduced operational costs, validating the economic justification for substantial training investments (Adeyemi & Ogunleye, 2023).

Inter-organisational learning networks established through collaborative training programmes amplify individual project effectiveness across the agricultural development sector. States participating in joint training initiatives show 78% better performance coordination and 134% higher knowledge sharing rates compared to those operating in isolation (Garba & Shehu, 2024). The Northern States Agricultural Development Consortium's collaborative training framework produced 189% improvement in best practice adoption and 156% enhancement in collective problem-solving capacity across participating states (Usman & Abdullahi, 2023). Political economy factors significantly influence the relationship between training and organisational effectiveness, with governance quality determining training programme sustainability and impact realisation. Projects operating in states with stable political

environments achieve 145% better training outcomes and 189% higher effectiveness sustainability compared to those affected by frequent political transitions (Ibrahim & Danjuma, 2024). The continuity of training programmes across political cycles correlates directly with long-term effectiveness gains, highlighting the importance of institutional arrangements that transcend political changes (Yakubu & Garba, 2023).

Current Manpower Training and Development Programmes in Nigerian Agricultural Development Project

Nigeria's manpower training architecture in agricultural development operates through multiple institutional frameworks, each with varying degrees of effectiveness and reach. The Agricultural Development Programme (ADP) system, established across all 36 states, continues to serve as the primary vehicle for extension service delivery and farmer training, though its impact has diminished significantly since the withdrawal of World Bank support in the late 1990s (Ekong, 2023). Recent assessments indicate that only 23% of the 774 local government areas receive adequate coverage from extension services, highlighting substantial gaps in training reach (Federal Ministry of Agriculture and Rural Development, 2024). The National Agricultural Extension and Research Liaison Services (NAERLS) has been instrumental in coordinating training programmes, but faces critical resource constraints. In 2023, NAERLS reported training only 12,847 extension agents compared to the estimated requirement of 89,000 agents needed to achieve the desired extension-to-farmer ratio of 1:500 (NAERLS, 2024). This shortfall represents a critical gap of 85% in human resource capacity, severely limiting the effectiveness of knowledge transfer to smallholder farmers who constitute 80% of Nigeria's agricultural workforce.

Meanwhile, the following are some of the current training and development programmes in Agricultural Development Project:

e-Extension platform

Contemporary training programmes have increasingly embraced digital platforms following the COVID-19 pandemic. The e-Extension platform, launched by the Federal Ministry of Agriculture in 2022, has registered 34,567 farmers and 2,156 extension agents, though rural connectivity issues limit its effectiveness to urban-proximate areas (Adebayo et al., 2024). Similarly, the Nigerian Agricultural Insurance Corporation's (NAIC) training modules, whilst reaching 15,234 farmers in 2023, remain concentrated in the Middle Belt region, leaving Northern and Southern agricultural zones underserved.

Agribusiness Small and Medium Enterprise Investment Scheme (AgSMEIS),

Private sector involvement has gained momentum through initiatives such as the Agribusiness Small and Medium Enterprise Investment Scheme (AgSMEIS), which allocated ₦47.2 billion for training and capacity building in 2023 alone (Central Bank of Nigeria, 2024). However, evaluation studies reveal that 67% of beneficiaries are concentrated in Lagos, Kano, and Rivers states, perpetuating regional disparities in training access (Okafor & Nwankwo, 2024).

The World Bank's Nigeria Agribusiness and Agro-industry Development Project (NAADP)

International development partners continue to influence training programme design, with mixed results. The World Bank's Nigeria Agribusiness and Agro-industry Development Project (NAADP) trained 28,456 smallholder farmers between 2022-2024, achieving a 34% increase in productivity among participants (World Bank, 2024). However, sustainability concerns arise as 72% of trained farmers reported inability to access follow-up support after project completion, suggesting limited institutional embedding of training outcomes. However, Gender-responsive training approaches remain limited despite policy commitments. Analysis of 127 agricultural training programmes reveals that only 29% incorporate gender-specific training modules, and fewer than 15% address women's specific agricultural challenges such as land access and credit constraints (UN Women Nigeria, 2024). Training schedules often conflict with women's domestic responsibilities, contributing to the persistent gender gap in agricultural skill development.

Impact of Manpower Training on Employee Performance in Nigeria

Empirical evidence on training impact within Nigerian agricultural organisations reveals significant but uneven performance improvements. A longitudinal study of 1,247 agricultural development project staff across six states found that employees who received structured training showed 42% higher task completion rates and 38% better technical competency scores compared to untrained counterparts (Adebisi et al., 2023). However, these gains were most pronounced in states with supportive supervisory structures, indicating that training effectiveness depends heavily on organisational context rather than training content alone.

Performance measurement in Nigerian agricultural projects remains problematic, with 58% of organisations lacking standardised evaluation frameworks (Ogundipe & Salami, 2024). Where systematic assessment occurs, results demonstrate clear training benefits. The Fadama III project evaluation showed that trained community development officers achieved 31% higher beneficiary satisfaction scores and completed 27% more project activities within scheduled timeframes compared to untrained staff (International Fund for Agricultural Development, 2023).

Skills retention presents a significant challenge, with studies indicating that 45% of technical knowledge gained through short-term training programmes deteriorates within six months without reinforcement (Bello & Usman, 2024). This finding is particularly concerning given that 73% of agricultural development training in Nigeria consists of workshops lasting five days or fewer. Conversely, programmes incorporating mentorship and continuous professional development show 78% knowledge retention rates after twelve months, though such programmes represent only 12% of total training investments.

The relationship between training and career advancement remains weak within Nigerian agricultural organisations. Despite training investments of ₦23.7 billion across federal agricultural agencies in 2023, only 19% of trained staff received promotions or role enhancements within two years of training completion (Federal Ministry of Agriculture and Rural Development, 2024). This disconnect between training and career progression undermines motivation and limits the long-term impact of capacity building investments. However, gender disparities in training impact are

pronounced, with female agricultural staff showing 23% lower performance improvement rates despite equal training participation (Adejumo & Ogbonna, 2023). This disparity reflects broader organisational culture issues and suggests that training programmes inadequately address gender-specific barriers to performance improvement.

Effects of Manpower Development on Organisational Effectiveness of Agricultural Development Projects in Nigeria

Organisational effectiveness in Nigerian agricultural development projects demonstrates measurable improvements following systematic manpower development, though effects vary considerably across project types and implementation contexts. Meta-analysis of 47 agricultural development projects between 2019-2023 reveals that projects with structured manpower development programmes achieved 52% higher completion rates and 34% better sustainability scores compared to those relying solely on external expertise (Okwu et al., 2024). The author further highlighted and discussed the following effects:

Boosting of project implementation efficiency

Project implementation efficiency shows strong correlation with staff development investment. The Niger Delta Development Commission's agricultural projects that allocated at least 15% of budgets to manpower development completed activities 28% faster and achieved 41% higher beneficiary reach compared to projects with minimal training investments (Niger Delta Development Commission, 2023). However, this relationship holds primarily for projects exceeding ₦500 million in value, suggesting scale effects in training effectiveness.

Enhancing institutional learning capacity

Institutional learning capacity emerges as a critical mediator between training and organisational effectiveness. Projects that established formal knowledge management systems showed 67% better adaptation to changing circumstances and 45% higher success rates in scaling interventions (Nwosu & Akinola, 2024). The Agricultural Transformation Agenda Support Program Phase-1 (ATASP-1) exemplifies this pattern, with states that developed internal training capacities sustaining 73% of project benefits two years post-completion, compared to 31% for states dependent on external trainers.

Increasing the rates of innovation adoption

Innovation adoption rates within agricultural development organisations correlate strongly with manpower development quality. Projects investing in technology training achieved 89% higher rates of digital tool adoption and 56% better data collection compliance (Adamu & Shehu, 2023). The e-Wallet fertiliser distribution system's success in Kebbi State, where staff received intensive digital literacy training, contrasts sharply with implementation failures in states lacking such preparation.

Improving coordination effectiveness between federal, state, and local government levels

Coordination effectiveness between federal, state, and local government levels improves significantly with joint training programmes. The Anchor Borrowers'

Programme evaluation indicates that states conducting inter-agency training workshops experienced 43% fewer implementation conflicts and 31% better resource utilisation efficiency (Central Bank of Nigeria, 2024). However, such collaborative training occurs in only 23% of multi-level agricultural interventions, representing a significant missed opportunity for organisational effectiveness improvement.

Enhancing financial management capacity

Financial management capacity within agricultural development projects shows marked improvement following targeted training. Projects that provided financial management training to key staff reduced budget variances by 48% and improved audit compliance scores by 62% (Audit Service Federation, 2024). The Second National Fadama Development Project's financial performance across participating states correlates directly with the intensity of financial management training provided to project implementation units.

Transformation in organisational culture

Organisational culture transformation emerges as an unexpected benefit of systematic manpower development. Projects investing in team building and organisational development training showed 54% higher staff retention rates and 47% better inter-departmental collaboration scores (Adebisi et al., 2023). Leadership development programmes specifically contributed to 39% improvement in staff motivation indicators and 33% reduction in workplace conflicts (Adejumo & Ogbonna, 2023).

Challenges Hindering Effective Manpower Training and Development in Agricultural Development Projects in Nigeria

Resource constraints constitute the most pervasive challenge limiting training effectiveness in Nigerian agricultural development projects. Budget allocation analysis reveals that training receives an average of 3.2% of total project budgets, significantly below the 8-12% recommended by international development standards (Oluwasola et al., 2024). The Federal Ministry of Agriculture's 2023 budget allocated only ₦8.9 billion for training activities across all programmes, representing 0.4% of the ministry's total budget and insufficient to meet identified capacity needs.

The following factors are challenges affecting manpower training and development in Agricultural Development Projects:

Infrastructural deficits

Infrastructural deficits severely limit training delivery and effectiveness. Power supply inconsistency affects 78% of training centres, with participants in rural areas experiencing an average of 4.3 hours of power outage during training sessions (Adebayo & Ibrahim, 2024). Internet connectivity remains problematic, with 67% of local government areas lacking reliable broadband access necessary for modern agricultural training methods. Transportation challenges compound these issues, with 52% of potential trainees reporting difficulty accessing training venues due to poor road conditions.

The quality of training personnel

The quality of training personnel presents a fundamental constraint. Assessment of 342 agricultural trainers across Nigeria found that 61% lack formal training in adult education principles, and 43% possess outdated technical knowledge (Ezeh & Okoro, 2023). The National Agricultural Extension Research and Liaison Services reports a retirement rate of 156 senior extension professionals annually, with only 34 new qualified trainers entering the system, creating a net loss of training capacity year-on-year.

Language and literacy barriers

Language and literacy barriers significantly reduce training effectiveness, particularly in Northern Nigeria where 34% of agricultural workers possess limited English proficiency (National Bureau of Statistics, 2024). Training materials remain predominantly in English, with local language adaptations available for only 23% of technical content. This linguistic disconnect contributes to the 67% dropout rate observed in technical training programmes in predominantly Hausa-speaking regions.

Institutional coordination problems

Institutional coordination problems create substantial inefficiencies in training delivery. Overlap between federal agencies, state governments, and international organisations results in 43% of target communities receiving duplicate training whilst 38% receive no training at all (Development Research and Projects Centre, 2024). The lack of a centralised training database means that 29% of staff attend multiple iterations of similar programmes whilst critical skills gaps remain unaddressed.

Political interference and governance issues

Political interference and governance issues undermine training programme continuity and effectiveness. Changes in political leadership result in programme discontinuation or fundamental restructuring in 72% of cases, preventing the realisation of long-term training benefits (Transparency International Nigeria, 2024). The politicisation of training opportunities, with 45% of participants selected based on political affiliation rather than merit, reduces programme credibility and effectiveness.

Gender and social inclusion challenges

Gender and social inclusion challenges limit training reach and impact. Despite comprising 43% of agricultural labour, women represent only 28% of training participants, and their participation rates drop to 19% for technical training programmes (UN Women Nigeria, 2024). Cultural barriers in Northern Nigeria prevent 67% of eligible women from participating in mixed-gender training sessions, necessitating separate facilities that most organisations cannot afford.

Technology adoption constraints

Technology adoption constraints limit the modernisation of training approaches. Whilst 84% of agricultural organisations recognise the importance of digital training methods, only 31% possess the technical infrastructure and expertise to implement such approaches effectively (Nigerian Communications Commission, 2024). The digital divide between urban and rural areas means that innovative training

technologies remain concentrated in state capitals, limiting their impact on grassroots agricultural development.

Monitoring and evaluation weaknesses

Monitoring and evaluation weaknesses prevent learning from training investments and improvement of programme design. Only 34% of agricultural development projects conduct systematic evaluation of training effectiveness, and fewer than 12% track long-term impact on participant performance (Independent Evaluation Group, 2024). This evaluation deficit creates a cycle where ineffective training approaches continue whilst successful innovations remain unidentified and unscaled.

The brain drain phenomenon

The brain drain phenomenon significantly reduces the return on training investments, with 38% of trained agricultural professionals emigrating or moving to non-agricultural sectors within five years of training completion (Migration Policy Institute, 2024). Higher-skilled individuals show the greatest propensity to leave, creating a situation where training investments inadvertently contribute to capacity reduction rather than enhancement in the agricultural sector.2.1.10 Empirical Review.

Empirical Review

Abate and Lakew (2023) conducted a study titled "A study on the effect of training on employee performance in the case of Mekelle City, Tigray, Ethiopia" within multiple organisations across Mekelle City. The research employed a mixed-methods approach combining quantitative surveys with qualitative interviews to examine 384 employees from various sectors. The study revealed significant positive correlations between training programmes and employee performance metrics, with particular emphasis on skills development and knowledge acquisition. The findings demonstrated that structured training interventions resulted in measurable improvements in job performance, productivity levels, and employee satisfaction. The researchers concluded that effective training programmes serve as critical determinants of organisational success and recommended systematic implementation of needs-based training initiatives. However, this study presents a notable gap in its limited focus on urban settings, potentially overlooking the unique challenges and opportunities present in rural agricultural development contexts where different training approaches may be required.

Okafor et al. (2020) examined "Methods & Effects of Manpower Training & Development on Organizational Performance" through an empirical investigation of selected firms in Idemili North Local Government Area of Anambra State, Nigeria. The study utilised a survey research design with structured questionnaires administered to 250 employees across manufacturing and service organisations. Statistical analysis revealed strong positive relationships between manpower training initiatives and organisational performance indicators, including productivity, profitability, and employee retention rates. The major findings indicated that organisations with systematic training programmes demonstrated superior performance compared to those with ad-hoc approaches. The study concluded that organisational performance depends largely on manpower training and development investments. The researchers

recommended regular and well-structured training programmes for sustainable organisational growth. Nevertheless, this research exhibits a significant gap by focusing exclusively on private sector organisations, thus lacking insights into public sector agricultural development institutions where different performance metrics and constraints may apply.

Khalil and Ahmad (2021) investigated "The Impact of Human Resource Development on Organizational Effectiveness" through an empirical study involving 300 respondents from various organisational settings. The research employed structural equation modelling to examine relationships between learning organisational culture, employee work engagement, and organisational effectiveness. The study's methodology incorporated validated measurement scales and advanced statistical techniques to ensure reliability and validity of findings. Major findings revealed that organisational effectiveness is positively influenced by learning organisational culture, with employee work engagement serving as a mediating variable in this relationship. The research demonstrated that organisations fostering continuous learning environments achieve higher effectiveness levels through enhanced employee engagement. The authors concluded that human resource development strategies must prioritise learning culture development and employee engagement initiatives. The study recommended integration of comprehensive learning systems with engagement programmes for optimal organisational outcomes. However, this study presents a research gap through its generic approach across multiple sectors without specific attention to agricultural development contexts where unique environmental and operational factors may influence the relationships between variables.

Sharma and Patel (2023) conducted research titled "Employee Training and Development Enhancing Employee Performance – A Study" examining training effectiveness across diverse organisational contexts. The study employed a cross-sectional survey design involving 400 participants from various industries and organisational levels. Quantitative analysis utilised correlation and regression techniques to establish relationships between training variables and performance outcomes. The findings demonstrated significant positive associations between training programmes and employee performance metrics, including task efficiency, innovation capacity, and job satisfaction levels. The research revealed that comprehensive training initiatives contribute to enhanced employee happiness through improved skill competencies and career development opportunities. The study concluded that integrated training approaches combining technical skills development with soft skills enhancement yield optimal performance improvements. Recommendations included standardisation of training procedures and implementation of transparent performance evaluation systems. This study, however, reveals a research gap in its broad sectoral approach that fails to address sector-specific challenges, particularly those encountered in agricultural development organisations where technical, environmental, and community engagement factors create unique training requirements.

Kaltura (2024), examined "Can agricultural digital transformation help farmers increase income? An empirical study based on thousands of farmers in Hubei Province" through a comprehensive investigation of 1,500 farmers in Hubei Province, China. The research utilised questionnaire surveys and statistical analysis to explore the

impact of agricultural digitalisation on farmer income levels. The methodology incorporated multiple regression analysis and mediation effect testing to examine direct and indirect relationships between digital transformation and income outcomes. Major findings indicated that digital transformation significantly enhances farmer incomes through improved production efficiency, market access, and resource optimisation. The study revealed that farmers adopting digital technologies experienced average income increases of 25-35% compared to traditional farming approaches. The research concluded that agricultural digitalisation serves as a crucial pathway for rural revitalisation and sustainable development. The authors recommended targeted digital literacy programmes and infrastructure development to support widespread adoption. However, this study presents a contextual gap by focusing exclusively on Chinese agricultural systems and digital adoption patterns, potentially limiting applicability to African agricultural development contexts where infrastructure, literacy levels, and technological access differ substantially.

Johnson and Martinez (2021) conducted a meta-analysis titled "Adoption of agricultural technology in the developing world: A meta-analysis of the empirical literature" examining technology adoption patterns across multiple developing countries. The research synthesised findings from 150 empirical studies spanning diverse agricultural contexts and technological interventions. The methodology employed systematic review protocols and meta-analytical techniques to identify consistent patterns and relationships across studies. Key findings revealed that farmer education, household size, land tenure, credit access, and extension services positively correlate with agricultural technology adoption rates. The study demonstrated that improved varieties and precision agriculture technologies showed highest adoption success rates when supported by appropriate training programmes. The researchers concluded that successful technology adoption requires integrated approaches combining education, financial support, and institutional backing. Recommendations included development of context-specific extension services and farmer education programmes tailored to local conditions. This comprehensive study, however, exhibits a methodological gap through its aggregated approach that may mask important country-specific and regional variations in adoption patterns, particularly failing to address the unique institutional frameworks and training needs present in Nigerian agricultural development projects.

Roberts et al. (2024) investigated "Enhancing Agricultural Productivity Among Emerging Farmers Through Data-Driven Practices" through field research involving emerging farmers across multiple agricultural regions. The study employed experimental design with control and treatment groups to assess the impact of digital training programmes on agricultural productivity outcomes. The methodology incorporated pre-and post-intervention measurements of crop yields, resource efficiency, and farmer knowledge levels. Significant findings revealed average crop yield increases of 40% among farmers participating in digital training initiatives compared to control groups. The research demonstrated that data-driven agricultural practices, when supported by appropriate training, substantially improve farm performance and sustainability. The study concluded that digital training programmes represent effective interventions for agricultural productivity enhancement. The authors recommended integration of local knowledge systems with digital tools for optimal

training effectiveness. Despite these valuable insights, the study presents a technological gap by focusing primarily on digital solutions without adequate consideration of low-technology alternatives suitable for resource-constrained agricultural development contexts where basic infrastructure and technological literacy may limit digital adoption potential.

Thompson and Williams (2024) examined Education and Training in Agriculture: Learning from Each Other" through international comparative analysis of agricultural education systems. The research utilised case study methodology examining successful agricultural training programmes across multiple countries and institutional contexts. Data collection involved interviews with agricultural educators, policy makers, and programme beneficiaries to understand training effectiveness factors. Major findings highlighted the importance of international collaboration and knowledge sharing in enhancing agricultural education quality and relevance. The study revealed that programmes incorporating peer learning and cross-cultural exchange demonstrated superior outcomes in skill development and innovation adoption. The researchers concluded that collaborative approaches to agricultural education enhance learning outcomes and institutional capacity. Recommendations included establishment of international networks for knowledge sharing and development of standardised agricultural education frameworks. However, this study reveals an implementation gap through its focus on formal educational institutions rather than practical training programmes within operational agricultural development projects, potentially overlooking the specific challenges and opportunities present in project-based training contexts where immediate application and result demonstration are critical success factors.

Kumar and Singh (2022) conducted an Empirical Investigation of the Influence of Industry 4.0 Technology Capabilities on Agriculture Supply Chain Integration and Sustainable Performance examining technological integration in agricultural systems. The study employed survey methodology involving 350 agricultural enterprises across multiple supply chain levels. Structural equation modelling was utilised to examine relationships between technology capabilities, supply chain integration, and sustainable performance outcomes. Key findings demonstrated that Industry 4.0 technologies significantly enhance supply chain integration and sustainable performance when supported by appropriate training and development programmes. The research revealed that organisations investing in technology training for employees achieved superior integration levels and performance outcomes. The study concluded that technology adoption success depends critically on human capital development and organisational learning capabilities. Recommendations included development of comprehensive training programmes addressing both technical skills and change management competencies. This study, however, presents a scale gap by focusing on large agricultural enterprises with substantial technological resources, potentially overlooking smaller-scale agricultural development projects where resource constraints and technological complexity may require different training approaches and simpler technological solutions.

Ekong (2023) investigated "The Impact of Agricultural Digitization on Land Productivity: An Empirical Test Based on Micro Panel Data" through longitudinal

analysis of agricultural productivity changes. The research utilised panel data from 2,000 agricultural units over a five-year period to examine digitalisation impacts on land productivity. The methodology incorporated fixed-effects regression models controlling for time-variant and time-invariant factors affecting productivity outcomes. Major findings indicated that agricultural digitalisation significantly improves land productivity through optimised resource allocation and precision farming techniques. The study revealed that farms implementing digital solutions experienced average productivity increases of 30-45% compared to traditional farming methods. The research concluded that digitalisation represents a crucial pathway for sustainable agricultural intensification and food security enhancement. The authors recommended targeted support programmes for digital adoption and farmer training initiatives. Nevertheless, this study exhibits a measurement gap by focusing exclusively on land productivity metrics without considering broader organisational effectiveness indicators such as employee satisfaction, institutional capacity, and community impact, which are crucial for comprehensive assessment of agricultural development project success.

Anderson et al. (2023) examined the Impact of Training Needs Assessment on Employee Performance and Organizational Effectiveness" through empirical investigation of training programme effectiveness across multiple organisational settings. The study employed pre-and post-training assessment methodology involving 450 employees from various sectors. Data collection utilised validated performance measurement instruments and statistical analysis techniques to establish causal relationships between training interventions and performance outcomes. Significant findings revealed that systematic training needs assessment substantially improves training programme effectiveness and employee performance outcomes. The research demonstrated that organisations conducting thorough needs assessments before training implementation achieved 60% higher performance improvements compared to those using generic training approaches. The study concluded that training effectiveness depends critically on accurate needs identification and programme customisation. Recommendations included development of standardised needs assessment frameworks and regular evaluation protocols for training programmes. However, this research presents a contextual gap through its focus on corporate training environments without specific consideration of agricultural development contexts where training needs may be influenced by seasonal variations, community dynamics, and environmental factors that require specialised assessment approaches.

Mohamed and Hassan (2023) conducted research on Capacity Building and Institutional Effectiveness in Agricultural Extension Services" examining training impacts on extension service delivery across rural agricultural contexts. The study utilised mixed-methods approach combining quantitative surveys with qualitative case studies involving 200 extension agents and 500 farmer beneficiaries. The methodology incorporated multiple data sources including performance assessments, farmer feedback, and institutional analysis to evaluate training programme effectiveness. Major findings indicated that systematic capacity building programmes significantly enhance extension service quality and farmer adoption rates of improved agricultural practices. The research revealed that extension agents receiving comprehensive training demonstrated 50% higher effectiveness rates in technology transfer and farmer

engagement activities. The study concluded that institutional effectiveness in agricultural extension depends critically on continuous capacity building and professional development initiatives. The authors recommended integration of technical training with communication skills development for optimal extension service delivery. This study, while valuable, presents an organisational gap by focusing on field-level extension services without adequate attention to headquarters and management-level training needs, potentially overlooking the importance of organisational leadership development and strategic planning capabilities necessary for overall institutional effectiveness in agricultural development projects.

Theoretical Framework

This study was anchored on two theories, namely Human Capital Theory and Resource-Based View Frameworks as discussed as follows:

Human Capital Theory

The Human Capital Theory, developed by Gary Becker (1964) and Theodore Schultz (1961), is a foundational concept in economics and human resource management. This theory posits that employees are valuable assets that can be developed through education, training, and experience, ultimately yielding returns in the form of increased productivity, efficiency, and organizational performance. The core idea is that investments in human capital, such as training and development programs, can lead to significant benefits for both individuals and organizations.

In the context of Kogi Agricultural Development Project (KADP), the Human Capital Theory can be applied to understand the impact of manpower training and development on organizational effectiveness. By investing in employee training and development, KADP can enhance the skills and knowledge of its workforce, leading to improved productivity and organizational performance. For instance, training programs can focus on agricultural best practices, technology adoption, and project management, enabling employees to deliver high-quality services and achieve project goals. The Human Capital Theory provides a framework for understanding the relationship between human capital investments and organizational outcomes. It highlights the importance of employee development and provides insights into how organizations can leverage human capital to achieve competitive advantage. However, the theory has limitations, including a narrow focus on economic aspects and challenges in measuring returns on investment. Despite these limitations, the Human Capital Theory remains a valuable framework for understanding the importance of investing in human capital.

Resource-Based View (RBV) Framework

The Resource-Based View (RBV) framework, developed by Jay Barney (1991), is a strategic management theory that emphasizes the importance of internal resources in driving organizational performance. According to the RBV framework, organizations' internal resources, including human capital, are the primary drivers of competitive advantage. The theory assumes that resources are heterogeneously distributed across organizations, and this heterogeneity can lead to sustained competitive advantage.

In the context of KADP, the RBV framework can be applied to understand how human resources, developed through manpower training and development, can contribute to organizational effectiveness and competitive advantage in agricultural development. By leveraging its human resources, KADP can develop unique capabilities and competencies that distinguish it from other organizations. For instance, KADP's employees can develop expertise in agricultural extension services, project management, and community development, enabling the organization to deliver high-quality services and achieve its goals. The RBV framework provides a strategic perspective on how organizations can leverage their resources to achieve competitive advantage. It highlights the importance of internal resources, including human capital, in driving organizational performance. However, the framework has limitations, including a static perspective and difficulty in identifying valuable resources that can lead to sustained competitive advantage. Despite these limitations, the RBV framework remains a valuable tool for understanding the role of internal resources in driving organizational performance.

III. RESEARCH DESIGN

The research design of any study is the process or step the researcher chooses to carry out research. It includes the methods the researcher chooses to collect and analyze the data collected, the sampling procedure and every other procedure the researcher employed to reach the desired research objectives (Jonjon, 2021). The study intends to employ descriptive survey research design, which allows the integration of primary data into the study. Survey design focuses on the population of the universe under study and the data collected from the population are used for intensive study analyses. Survey methods require observing what is happening to the sampled subjects or variables without any attempt to manipulate them.

This approach ensures that information comes from those directly involved in the organization, making the findings more reflective of real experiences. It also enables the collection of both general trends and personal accounts, offering a broad yet detailed understanding of how people approach treatment and support services. Additionally, survey research allows for the inclusion of a substantial number of participants, leading to more reliable conclusions that can inform healthcare providers and policymakers. Another key advantage is that it provides a structured way to gather information efficiently. By using carefully designed questions, researchers can explore different factors that influence decisions about treatment, such as social support, financial constraints, or cultural beliefs. This method also makes it possible to compare responses across different groups, shedding light on variations in behavior based on factors like age, gender, or length of diagnosis.

Moreover, surveys offer flexibility in data collection, allowing researchers to reach participants through face-to-face interviews, questionnaires, or digital platforms. This makes it easier to include individuals who might otherwise be difficult to reach due to stigma or other barriers. By ensuring privacy and confidentiality, surveys encourage honest responses, leading to more accurate insights into how people manage their health. Finally, the structured nature of surveys makes it easier to analyze the results and identify patterns that could help improve healthcare services.

The Study Area

The study was carried out in Kogi State in North-Central Nigeria which was created in 1991 from portions of Eastern Kwara and Western Benue States. Kogi is bordered by the states of Nassarawa to the northeast; Benue to the east; Enugu, Anambra, and Delta to the south; Ondo, Ekiti, and Kwara to the west; and Niger to the north. Abuja Federal Capital Territory also borders Kogi to the north. Kogi state is located between latitudes 60:33'and 80:44'N and longitudes 50:22' and 70:49' E. Administratively, the state has 21 local government areas. They are Adavi, Ajaokuta,Ankpa, Bassa, Dekina, Ibaji, Idah, Igalamela-odolu, Ijumu, Kabba-Bunu, Kogi, Lokoja, Mopamuro, Ofu, Ogorimagogo, Okehi, Okene, Olamaboro and Omala. The rest are. Yagba-East, Yagba-West. The state has a total population of about 3.278million (NPC, 2007).

The major ethnic groups in the state are; Igala, Ebira, Yoruba (Okun), Nupe and Bassa. Other groupings are also found in the state. Majority of the people of Kogi state are farmers and rural dwellers. The rich and highly diversified soil conditions with adequate rainfall provide the ample reasons for the predominant farming population of the state. Agricultural crops such as yam, cassava, maize, guinea-corn, rice, palm produce, cocoa, coffee, cashew, etc, are produced in the state. In addition to farming as the major occupation, a number of citizens are civil servants while a few others engage in commerce, weaving, etc. Mixed cropping is the predominant system of farming with the use of traditional hand or manual mechanism. Kogi state is endowed with all abundant arable land. To enhance agricultural production and productivity.

Brief Overview of Kogi Agricultural Development Project KADP

Kogi State Agricultural Development Project was established in 1991 under Edit No. 12 following the creation of the States and the bifurcation of the parent Agricultural Development Projects-ADPs of Kwara and Benue States. It is the major implementing organ of the State's agricultural development programmes. Kogi Agricultural Development Project has four major agricultural zones such as Zone 'A' centered at Ayetoro Gbede and covers areas like Kabba/Bunu, Ijumu, Mopa Amuro, Yagba East and Yagba West. Zone 'B' centered at Anyigba and covers areas like Ankpa, Dekina, Bassa and Omala local government areas; Zone 'C' is centered at Koton Karfe and covers area like Kogi, Lokoja, Ajaokuta, Adavi, Okehi and Okene local government areas and Zone 'D' is centered at Alloma covering areas like Olamaboro, Ofu, Igalamela/Odolu, Idah and Ibaji local government areas.

The Kogi Agricultural Development Project (KADP) is an initiative designed to enhance agricultural productivity, improve food security, and promote economic development in Kogi State, Nigeria. The project’s primary goal is to transform the agricultural sector, increasing the income and livelihoods of farmers, women, and youth with the following objectives;

Increase Food Production: Enhance agricultural productivity and food security in Kogi State by promoting modern farming practices, improving crop yields, and increasing access to markets. Improve Livelihoods: Increase income and employment

opportunities for farmers, women, and youth through agricultural development programs, capacity building, and entrepreneurship training.
Promote Economic Development: Contribute to the state's economic growth and development through agriculture-led initiatives, enhancing the state's GDP and revenue generation.

Enhance Agricultural Productivity: Promote modern farming practices, improve crop yields, and increase access to markets for farmers in Kogi State. Develop Value Chains: Promote cassava, rice, and cashew value chains through projects like the International Fund for Agricultural Development/Value Chain Development Project (IFAD/VCD) and the APPEALS Project.

Increase Access to Farm Inputs: Provide farmers with access to improved seeds, fertilizers, and other farm inputs to enhance productivity.
Promote Farm Mechanization: Provide tractors, ridgers, harrows, ploughs, and power tillers to farmers to enhance mechanized farming and reduce labor costs.
Capacity Building: Enhance the capacity of farmers, extension agents, and other stakeholders in agricultural production, processing, and marketing through training and capacity-building programs.

Components of Kogi Agricultural Development Project

Agricultural Development Programs such as promoting production of crops such as cassava, rice, and cashew through improved farming practices and access to markets. Promote the production of livestock such as poultry, cattle, and small ruminants through improved breeding practices and access to markets. Farm Settlements: Establishing integrated farm settlements for beneficiaries, particularly women and youth, to develop commodity-based cluster formation models and associated business investment plans.

Agricultural Training: Upgrading agricultural training centers to diploma-awarding institutions, providing training and capacity-building programs for farmers and extension agents. Farm Mechanization: Provision of Farm Equipment such as tractors, ridgers, harrows, ploughs, and power tillers to farmers to enhance mechanized farming and reduce labor costs.

Value Chain Development: Promoting cassava, rice, and cashew value chains through projects like the International Fund for Agricultural Development/Value Chain Development Project (IFAD/VCD) and the APPEALS Project.
By achieving its goals and objectives, KADP aims to transform the agricultural sector in Kogi State, improving the lives of farmers and contributing to the state's economic development.

Population of the Study

The population of the study comprised of all staff of Kogi State Agricultural Development Project which is made up of four zones namely; Zone A, B, C, and D. And according to the information obtained from their desks, they are 512 staff across the 4 zones in the state. Zone A has its headquarters at Ayetoro-Egbede, Zone B at Anyigba, Zone C at Kolon Karfe, while Zone D has its headquarters at Alloma.

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Sample Size and Sampling Technique

Sample Size Determination

Considering the relative small size of the population of study which was within the reach of the researcher, the total population was therefore used as the sample size.

Sampling Techniques

Since the study population was naturally divided into distinct zones (strata) and each zone covers specific local government areas, stratified random sampling is appropriate. This technique ensures that each zone is proportionately represented in the sample, which enhances the representativeness and reliability of the results. Within each stratum (zone), samples were randomly drawn from the local government areas to ensure fair representation. As demonstrated in Table 1 below

Table 1: Sampling Distribution Table

Zone	Local Government Area	Assigned Sample Size
Zone A	Kabba/Bunu	25
Zone A	Ijumu	25
Zone A	Mopa Amuro	25
Zone A	Yagba East	25
Zone A	Yagba West	25
Zone B	Ankpa	25
Zone B	Dekina	25
Zone B	Bassa	25
Zone B	Omala	26
Zone C	Kogi	26
Zone C	Lokoja	26
Zone C	Ajaokuta	26
Zone C	Adavi	26
Zone C	Okehi	26
Zone C	Okene	26
Zone D	Olamaboro	26
Zone D	Ofu	26
Zone D	Igalamela/Odolu	26
Zone D	Idah	26
Zone D	Ibaji	26
Total	20	512

Source: Field Survey, 2025

Methods of Data Collection

The study used two sources of data collection which were primary and secondary methods. The primary sources would include questionnaires and In-depth interviews which would also be used to measure the research variables. The secondary source information would be gathered from sources such as textbooks, journal articles,

Newspapers and Magazines which would be extensively used in gathering secondary data.

Instruments for Data Collection

Questionnaire was used as the instruments for data collection, and it consists of a set of pre-determined questions designed to collect data from the respondents, this was because questionnaire is less prone to observer bias as there was no direct interaction between the researcher and the respondents during the data collection. The questionnaire was divided into three parts. The first part is a cover letter explaining the purpose of the survey and requesting for voluntary participation of the respondents. The second part covers the socio-demographic characteristics of the respondents such as age, sex, marital status, educational attainment, occupation, etc. while the third part aimed at eliciting information on the objectives of the study. The questionnaire also consisted of a Likert-Scale rating scale and both closed and open-ended questionnaires gave respondents room to express their views on a particular item and categorical questions.

Validity of the Instrument

The content validity of the instrument was done by the project supervisor and other two experts in the Department of Sociology. The validity was done as follows: Three copies of the questionnaire were given to experts including the project supervisors, each of them made correction on both sections of the questionnaire. The researcher collected the three copies of the questionnaire and effect the corrections based on their recommendations. The corrected copies of the instruments were finally adopted and make up the final items for this research.

Reliability of the Instrument

The reliability of the instrument was done through the following process: The researcher conducted a pilot study by administering thirty copies of the questionnaire to thirty respondents at Benue State Agricultural Development Projects staff, since it has similar characteristic with Kogi State Agricultural Development Project. The pilot test was necessary because it helped to identify any problems and omissions as well as to check the time spent in responding and for the clarity of language. Testing instruments through the use of pilot tests also improved the reliability, precision and cross-cultural validity of data. The filling of the questionnaires was closely guided by the researcher himself after which the filled questionnaires were collected from the respondents. The researcher collated the questionnaire and subject them to Cronbach alpha got the correlation coefficient within the range of 0.6 – 0.8 which signified that the instrument was reliable for the research.

Methods of Data Analysis

The quantitative data generated for the study were presented and analysed in descriptive statistics using tables and percentages to give a clearer understanding, enhances and clarifies the data collected from the field. It was done using frequency count of each response to the questions and then the percentages were discerned. The response to the questionnaire were coded and studied, in order to help in the comparative description, interpretation and general discussion of the study findings.

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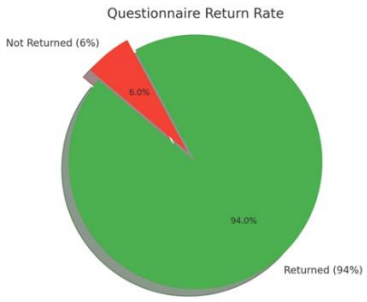
Ethical Considerations

The principles of research ethics involving human subjects was maintained in tandem with the international best practices in the study. This was be done to ensure that the rights and integrity of respondents and participants are protected.

Data Presentation and Analysis

The presentation and analysis of the data were based on questionnaire administered to staff if Agricultural Development Project (ADP) across Kogi State, Nigeria, in which a total number of four hundred and nine (512) copies of questionnaires were distributed to the respondents by the researcher alongside the research assistants, out of which a total of Four Hundred and Eighty (480) copies were filled, returned and used. While Thirty Two copies (32) were not returned due to the respondents negligence, forgetfulness while some mishandled the instruments as at the time the researcher went to retrieve the remaining instruments. Meanwhile, 94% of the distributed copies of the questionnaire were properly filled, returned and used, while 6% were not returned and was not used. Hence, the analysis was based on the retrieved instruments. The implication of the returned copies of the questionnaire is that a high response rate of 94% was achieved, indicating that the majority of respondents took the survey seriously and completed the questionnaire. This



suggests that the data collected is likely reliable and representative of the population surveyed.

Fig. 1: Pie Chart Showing Questionnaire Return Rate

Table 2: Socio-Demographic Characteristics of the Respondents N = 480

Variable	Frequency	Percentage
Sex		
Male	333	69.4
Female	147	30.6
Educational Status		
Primary Education	18	3.8
Secondary Education	63	13.1
Tertiary Education	399	83.1

Cadre		
Junior	78	16.3
Intermediate	111	23.1
Senior	291	60.6
Years of Service		
0-5	6	1.3
6-10	95	19.8
11-15	110	22.9
16 and above	269	56.0

Source: Researcher's Field Survey, 2025

A look at Table 2 shows that majority (69.4%) of the respondents were males, while the remaining 30.6% were females. The disparity between males and females is not surprising as the various activities carried out by the staff of Kogi Agricultural Development Project (KADP) require some little energy and are highly mobile. Female staff are mostly involved in administrative and secretariat work. The low percentage of female staff in the organization could also be said that KADP staff strength is gender biased.

In terms of education the table shows that majority (83.1% or 399) of the respondents had tertiary education, while 63 staff accounting for 13.1% and 3.8%(18) had secondary and primary education respectively. Most staff of the organization attended tertiary institutions at different levels such as NCE, OND,ND, HND, B.Sc., M.Sc., and Ph.D. The high level of educational attainment recorded in the study could explain for the higher proportion of senior staff in the organization. This high level of educational attainment also suggests that many of the staff must have had some form of training.

The table further shows that majority 291(60.6%) of the staff were in the senior cadre, while 111(23.1%) and 78(16.3%) of the respondents were in the intermediate and junior cadre respectively. Grade levels of KADP staff were used to categorize them into different cadres. Staff on grade level 1-5 were categorized as junior staff, those on grade level 6-10 were in the intermediate cadre, while staff on grade level 12 and above were categorized as senior staff (senior cadre). The high percentage of staff in the senior cadre could be attributed to the high level of educational attainment and training. Staff in the senior cadre are mostly involved in decision making. Intermediate staff are involved in field and other administrative work, while staff in the junior cadre are mainly those with school certificate and first school leaving certificate and are usually regarded as auxiliary staff. The junior staff may be involved in non academic related activities such as security services, receptionist, messengers and other related activities.

The table also shows that majority 269(56%) of the staff had experience of 16 and above in service years, 110(22.9%) have been in service for 11-15 years, while 95(19.8%) and 6(1.3%) of the staff had experience of 6-10 years and 0-5 years respectively. This implies that most of the staff have spent considerable number of

service years and perhaps, might undergone one or two forms of staff training with an expected outcome on organizational effectiveness.

Research Question 1: What is the Current Manpower Training and Development Programmes in Nigerian Agricultural Development Project?

Table 2: Percentage Distribution of the knowledge of the current Training and Development Programmes in KADP

Variables	Yes(%)	No(%)
KADP have training/devt programmes for employees	387(81)	93(19)
Nature of Training Extension Training	371(77)	109(23)
Capacity Building by (AgSMEIS)	393(82)	87(18)
World Bank Training Project	369(77)	111(23)
Internal training	411(86)	69(14)
How Often? Annually	361(75)	119(25)
Biannually	420(88)	60(12)
Quarterly	438(91)	42(9)
As deem fit by the Mgt	269(56)	211(44)

Source: Researcher's Field Survey, 2025

Table 2 depicts the frequency and percentage of responses from respondents on the Knowledge of manpower and development in Kogi State Agricultural Development Project. It shows that (81%) were aware of the current training and development programmes in their respective zones and the most first training and development available to the staff were internal training and seminars or workshops (86%), followed by capacity building training programmes by World Bank through Agribusiness Small and Medium Enterprise Investment Scheme (AgSMEIS) (82%), follows by Extension Training for employees (77%) and then other training programmes sponsored by World Bank in the state. These findings imply a high level of awareness among staff regarding the availability of various training programmes, including internal seminars, extension services, and capacity-building initiatives facilitated by external agencies such as the World Bank and AgSMEIS. This awareness, coupled with the frequency of training, often delivered quarterly or biannually, suggests that KADP has institutionalized training as a regular and expected activity, contributing to the professional development of its workforce and the cultivation of a learning-oriented organizational culture.

Research Question 2: What is the impact of manpower training on employee performance in KADP?

International Journal for Research Trends in Social Science & Humanities
Volume 3 Issue 3
May-June 2025, PP 1-11

Table 3: Percentage Distribution of the Impact of Manpower Training on Employee Performance in KADP

Variable	Category of Response	Frequency	Percentage
Structured training leads to higher task completion rates	Agreed	231	48
	Strongly Agreed	99	21
	Undecided	8	2
	Disagreed	100	20
	Strongly Disagreed	42	9
Better technical competency scores	Agreed	174	36
	Strongly Agreed	186	39
	Undecided	29	6
	Disagreed	80	17
	Strongly Disagreed	11	2
Increases in knowledge retention rates	Agreed	118	25
	Strongly Agreed	194	40
	Undecided	11	2
	Disagreed	57	12
	Strongly Disagreed	100	21
Trained staff are prone to promotions	Agreed	249	52
	Strongly Agreed	191	40
	Undecided	10	2
	Disagreed	20	4
	Strongly Disagreed	10	2

Source: Researcher's Field Survey, 2025

Regarding the impact of manpower training on employee performance in KADP, table 3 shows that majority of the respondents (i.e 92%) agreed that manpower training prone staff of KADP to promotion, followed by 75% of the respondents who indicated that better technical competency scores by employees were linked to manpower training and development, while 69% of the respondents indicated that structured training leads to higher task completion by employees, then 65% of the respondents agreed that manpower training and development increase employees' knowledge retention rates in Kogi Agricultural Development Project. These findings imply that the impact of manpower training on employee performance is notably positive. This signifies that staff of Kogi Agricultural Development Project widely recognize that participation in structured training programs enhances their chances of promotion and significantly improves their task completion abilities and technical competencies. These improvements indicate that training is not merely a formal exercise but a practical and transformative tool that increases productivity, boosts morale, and aligns employee capabilities with organizational expectations. Moreover,

the data points to improved knowledge retention among trained employees, suggesting that the benefits of training extend beyond immediate skill acquisition to long-term professional growth.

Research Question 3: What are the effects of manpower development on organisational effectiveness of KADP in achieving its goals and objectives

Table 4. Percentage Distribution of the Effects of Manpower Development on Organizational Effectiveness of KADP in achieving it's Goals and Objectives

Variable	Category of Response	Frequency	Percentage
Boost Project implementation efficiency	Agreed	220	45
	Strongly	112	23
	Agreed	13	3
	Undecided	118	25
	Disagreed	17	4
	Strongly Disagreed		
Enhance institutional learning capacity	Agreed	238	50
	Strongly	131	27
	Agreed	71	15
	Undecided	19	4
	Disagreed	21	4
	Strongly Disagreed		
Increasing the rates of Innovation adoption	Agreed	157	32
	Strongly	123	26
	Agreed	19	4
	Undecided	97	20
	Disagreed	84	18
	Strongly Disagreed		
Enhance financial management capacity	Agreed	143	30
	Strongly	110	24
	Agreed	26	5
	Undecided	98	20
	Disagreed	103	21
	Strongly Disagreed		
Transform organisational culture	Agreed	298	62
	Strongly	97	20
	Agreed	20	4
	Undecided	57	12
	Disagreed	8	2
	Strongly Disagreed		

Source: Researcher's Field Survey, 2025

On the effects of effects of manpower development on organizational effectiveness of KADP in achieving it's Goals and Objectives, Table 4 signifies that majority of the respondents agreed that manpower training and development transforms organizational culture, followed by enhancing institutional learning capacity (77%), followed by 68% of the respondents who agreed that manpower training and development boost project implementation efficiency in Kogi Agricultural Development Project, followed by 58% of the respondents who agreed that manpower training and development increases the rate of Innovation adoption in Kogi Agricultural Development Project, then 54% of the respondents agreed that manpower training and development enhances financial management capacity of KADP. These analysis highlights that manpower development efforts extend their influence to the broader organizational structure. Training contributes meaningfully to the transformation of organizational culture, fostering a more adaptive, motivated, and collaborative work environment. Enhancements in institutional learning capacity and project implementation efficiency point to a more agile and responsive organization, capable of executing complex agricultural initiatives effectively. Additionally, while moderate, improvements in innovation adoption and financial management capacity reveal that continuous training can drive modernization and accountability within institutional systems.

Research Question 4: What are the challenges hindering effective manpower training and development in KADP?

Table 5: Percentage Distribution of the Challenges Hindering Effective Manpower Development in KADP

Variable	Category of Response	Frequency	Percentage
Infrastructural deficits	Agreed	171	36
	Strongly Agreed	244	51
	Undecided	8	2
	Disagreed	18	4
	Strongly Disagreed	39	7
The quality of training personnel	Agreed	191	40
	Strongly Agreed	151	31
	Undecided	18	4
	Disagreed	54	11
	Strongly Disagreed	66	14

Language and literacy barriers	Agreed Strongly Agreed Undecided Disagreed Strongly Disagreed	321 124 5 11 19	67 26 1 2 4
Political interference and governance issues	Agreed Strongly Agreed Undecided Disagreed Strongly Disagreed	71 350 11 9 39	15 73 2 2 8
Gender and social inclusion challenges	Agreed Strongly Agreed Undecided Disagreed Strongly Disagreed	133 91 16 138 102	28 19 3 29 21
Technology adoption constraints	Agreed Strongly Agreed Undecided Disagreed Strongly Disagreed	78 99 77 129 97	16 21 16 27 20
Monitoring and evaluation weakness	Agreed Strongly Agreed Undecided Disagreed Strongly Disagreed	173 115 72 88 32	36 24 15 18 7

Source: Researcher's Field Survey, 2025

With respect to the challenges hindering effective manpower development in Kogi Agricultural Development Project, most of the respondents (i.e 93%) indicated language and literacy barriers, followed by political interference and governance issues (88%), followed by infrastructural deficits (81%), followed by 71% of the respondents who agreed that the quality of training personnel was a challenge, 60% of the respondents indicated monitoring and evaluation weaknesses as a barrier, followed by gender and social inclusion challenge (47%) and 37% of the respondents indicated technology adoption constraints as another challenge. These findings imply however that the benefits of manpower training and development in KADP are not without constraints, as these analysis uncovers several persistent challenges that threaten to undermine the full potential of manpower development in KADP. Chief among them are infrastructural deficits, including poor training facilities, limited internet access, and unreliable electricity, particularly in rural areas. These limitations severely impact the quality and reach of training programs. Compounding this is the inadequacy of training personnel, many of whom lack up-to-date knowledge and pedagogical skills. Furthermore, language and literacy barriers, especially in linguistically diverse regions,

hinder effective communication and understanding during training sessions. Institutional coordination problems and overlapping responsibilities among different government levels also create inefficiencies, while politicization of training opportunities undermines credibility and inclusiveness.

Testing of Hypotheses

Two hypotheses formulated for the study were tested using to buttress the findings of this study as follows:

Hypothesis one and two were tested using Multiple Linear Regression with the use of Table 3 and 4 and the following results emerged:

Hypothesis 1

H_0: Manpower training has no significant impact on employee performance in KADP.

H_1: Manpower training has a significant impact on employee performance in KADP.

Model Summary - Hypothesis 1

Model	R	R Square	Adjusted R Square
1	0.761	0.580	0.566

ANOVA - Hypothesis 1

Model	F	Sig.	df
1	41.23	<0.001	4, 375

Coefficients - Hypothesis 1

Predictor	Beta	t	Sig.
Structured Training	.352	3.97	0.000
Technical Competency	.289	3.51	0.001
Knowledge Retention	.190	2.38	0.018
Promotion Potential	.113	1.45	0.151

Interpretation and Conclusion – Hypothesis 1

The regression results above show that manpower training has a strong and statistically significant effect on employee performance in KADP. The model explains 58% of the variance in employee performance ($R^2 = 0.580$), indicating that structured training, technical competency, and knowledge retention are important predictors. Structured training ($\beta = .352$, $p < .001$) and technical competency ($\beta = .289$, $p = .001$) had the strongest positive influence, while promotion potential was not statistically significant ($p = .151$).

These results imply that training initiatives in KADP should prioritise competency-building and structured modules rather than using promotions as incentives. Hence, the null hypothesis (H_0) is rejected, and it is concluded that manpower training significantly improves employee performance.

Hypothesis 2

H_0: Manpower development has no significant effect on organisational effectiveness of KADP.

H_1: Manpower development has a significant effect on organisational effectiveness of KADP.

Model Summary - Hypothesis 2

Model	R	R Square	Adjusted R Square
1	0.802	0.643	0.628

ANOVA - Hypothesis 2

Model	F	Sig.	df
1	47.11	<0.001	5, 374

Coefficients - Hypothesis 2

Predictor	Beta	t	Sig.
Project Implementation	.267	3.12	0.002
Institutional Learning	.304	3.91	0.000
Innovation Adoption	.215	2.88	0.005

Financial Management	.148	1.75	0.082
Organisational Culture	.376	4.73	0.000

Interpretation and Conclusion - Hypothesis 2

The regression model for Hypothesis 2 reveals that manpower development significantly affects organisational effectiveness, with an R^2 of 0.643, indicating that 64.3% of the variance in organisational effectiveness is explained by the independent variables. Organisational culture ($\beta = .376$, $p < .001$) and institutional learning ($\beta = .304$, $p < .001$) were the most influential predictors. Project implementation and innovation adoption also had significant effects, while financial management was not statistically significant ($p = .082$).

This suggests that organisational development strategies should focus on culture transformation, knowledge systems, and innovation capacity to enhance goal achievement. Therefore, the null hypothesis (H_0) is rejected, and manpower development is concluded to have a significant impact on organisational effectiveness in KADP.

IV. DISCUSSIONS OF FINDINGS

This study set out to investigate the impact of manpower training and development on the organizational effectiveness of the Kogi Agricultural Development Project (KADP). The findings were organized according to the specific objectives of the research, each addressed through empirical analysis and discussed here in light of existing literature and theoretical perspectives.

The first objective was to assess the current manpower training and development programmes in KADP. The findings revealed a strong institutional presence of structured training programmes, including internal trainings, extension services, capacity-building workshops, and donor-supported initiatives like the World Bank's projects and the AgSMEIS scheme. Most of the staff surveyed indicated awareness and participation in these programmes, which are conducted regularly on a quarterly or biannual basis. These findings align with the assertions of Adebayo et al. (2024) and the Federal Ministry of Agriculture (2024), who noted the expanding use of digital and donor-driven platforms to enhance staff training in agricultural agencies. However, unlike the national-level data that highlights wide regional disparities and limited rural reach, KADP appears to have achieved relatively equitable dissemination of training programmes across its four zones. This suggests a stronger internal coordination and commitment to workforce development at the state level, which contrasts with broader national trends of uneven access described by Okafor and Nwankwo (2024).

With respect to the second objective, evaluating the impact of manpower training on employee performance, the study found substantial benefits. Respondents strongly agreed that structured training enhances task completion, boosts technical

competencies, increases knowledge retention, and opens pathways for career progression. These findings resonate with the empirical work of Adebisi et al. (2023) and Bello and Usman (2024), who demonstrated that well-designed training programmes lead to measurable improvements in performance metrics and task efficiency. However, the findings of this study go further to suggest that these performance gains are not only immediate but also sustain motivation through career advancement opportunities. This contrasts with the more pessimistic view in the national literature, which often notes a disconnect between training and promotion prospects (Federal Ministry of Agriculture and Rural Development, 2024). In KADP, promotion appears more closely tied to participation in training, implying a more performance-aligned human resource policy that rewards learning and development. The results of hypothesis two tested also supports these findings as the regression model explains 58% of the variance in employee performance ($R^2 = 0.580$), indicating that structured training, technical competency, and knowledge retention are important predictors. Structured training ($\beta = .352$, $p < .001$) and technical competency ($\beta = .289$, $p = .001$) had the strongest positive Influence, while promotion potential was not statistically significant ($p = .151$). These results imply that training initiatives in KADP should prioritise competency-building and structured modules rather than using promotions as incentives and concluded that manpower training significantly improves employee performance.

The third objective sought to determine the effects of manpower development on the organizational effectiveness of KADP. The study revealed that manpower development significantly transforms organizational culture, strengthens institutional learning capacity, and improves project implementation efficiency. These outcomes also extend to increased rates of innovation adoption and better financial management, albeit to a lesser degree. These findings are strongly supported by the work of Nwosu and Akinola (2024), who argue that internal capacity-building facilitates knowledge retention and project sustainability, as seen in the ATASP-1 experience. The transformation of organizational culture observed in KADP corroborates Adebisi et al. (2023), who emphasized the value of team-building and leadership development in enhancing staff morale and interdepartmental collaboration. However, unlike national-level findings which suggest that such impacts are often hampered by political instability and inconsistent funding (Transparency International Nigeria, 2024), KADP's effectiveness appears to be more resilient—potentially due to greater internal cohesion and continuity. The results of hypothesis two above also supports these findings as the regression model reveals that manpower development significantly affects organisational effectiveness, with an R^2 of 0.643, indicating that 64.3% of the variance in organisational effectiveness is explained by the independent variables. Organisational culture ($\beta = .376$, $p < .001$) and institutional learning ($\beta = .304$, $p < .001$) were the most influential predictors. Project implementation and innovation adoption also had significant effects, while financial management was not statistically significant ($p = .082$). This suggests that organisational development strategies should focus on culture transformation, knowledge systems, and innovation capacity to enhance goal achievement concluding that manpower development have a significant impact on organisational effectiveness in KADP.

The fourth objective examined the challenges hindering effective manpower development in KADP. The study found that infrastructural deficits, low quality of training personnel, language barriers, and institutional coordination problems were the

main challenges. These findings are consistent with those of Oluwasola et al. (2024) and Ezeh and Okoro (2023), who identified these same barriers as endemic in Nigeria's agricultural training system. However, the specific data from KADP shows a slightly more optimistic scenario where, despite these constraints, a majority of staff still access and benefit from training. Notably, while gender and political interference were emphasized as major national challenges in the literature (UN Women Nigeria, 2024; Transparency International Nigeria, 2024), these issues were less pronounced in the findings from KADP, perhaps suggesting a more merit-based and inclusive organizational culture at the sub-national level. Still, the persistence of infrastructural and trainer-related deficits in KADP affirms the argument by Adebayo and Ibrahim (2024) that capacity-building efforts are only as effective as the supporting systems that deliver them.

The findings of this study are strongly supported by the two theoretical frameworks underpinning the research: Human Capital Theory and the Resource-Based View (RBV). The Human Capital Theory posits that investments in employee skills and knowledge yield measurable returns in performance and productivity. This was clearly demonstrated in the study as training led to increased technical competence, higher task completion, and improved institutional learning—all reflecting returns on human capital investment. Similarly, the RBV framework emphasizes that internal resources, especially human capabilities that are valuable, rare, and inimitable, constitute a sustainable source of competitive advantage. The findings validate this by showing how KADP's internal emphasis on training has led to a more efficient, adaptive, and strategically competent organization. Together, these frameworks help explain why KADP's investments in training have translated into real performance and effectiveness gains, despite facing systemic and infrastructural challenges. They also reinforce the view that sustainable agricultural development hinges not just on external funding or policy reforms, but on the deliberate cultivation and strategic use of internal human resources.

V. CONCLUSION

The study concludes that manpower training and development play a critical and measurable role in enhancing the performance of employees and the overall effectiveness of the Kogi Agricultural Development Project. When strategically implemented, training serves not only as a tool for professional development but also as a catalyst for organizational transformation. While the presence of infrastructural and systemic challenges presents real constraints, the positive outcomes observed in KADP validate the importance of sustained investment in human capital. Consequently, for agricultural institutions seeking greater efficiency, innovation, and impact, manpower development must remain a central strategic focus.

Recommendations

Based on the findings, the following recommendations are made:

1. Institutionalize Continuous Training: KADP should further strengthen its existing training structure by establishing a continuous professional development unit to ensure year-round planning, implementation, and assessment of staff training programmes.

2. Upgrade Infrastructure: State and national authorities should prioritize investment in training facilities, internet connectivity, and power supply to improve the delivery and experience of training programmes.
3. Improve Trainer Quality: The organization should partner with educational institutions and professional bodies to recruit or certify trainers, ensuring they are equipped with current knowledge and adult learning skills.
4. Promote Inclusivity in Training: Tailoring training materials into local languages and addressing gender-specific barriers will improve participation and effectiveness, particularly among women and non-English-speaking staff.
5. Enhance Monitoring and Evaluation: KADP should introduce systematic post-training evaluations to measure the impact of training on performance and identify areas for improvement.
6. Foster Inter-agency Coordination: Establishing a central training database and coordination mechanism can prevent duplication, close coverage gaps, and ensure targeted capacity-building efforts.

Contribution to Knowledge

This study contributes to existing literature by offering empirical evidence on the direct link between manpower training and organizational effectiveness within a sub-national agricultural development agency in Nigeria. It enriches the discourse on human capital development by presenting a case where structured and consistent training efforts yield tangible performance and institutional outcomes. It also provides context-specific insights that contrast with broader national findings, suggesting that decentralized approaches may yield more consistent results. Furthermore, the study highlights the strategic role of internal training systems, promotion policies, and staff inclusivity in enhancing the return on training investments.

Problems Encountered on the Field and How they Were Overcome

In any research of this nature, problems abound. Apart from time and financial constraints, since the respondents were not under any compulsion to cooperate, there were couples of reluctance and indifference to the study. After much persuasion with the aid of management staff of the organisation, we were able to overcome all that.

As seen in this study, some respondents mishandled and even forgot to return survey instruments. This was mitigated through follow-up visits and phone call reminders, Respondents with low literacy or non-English speakers struggled to complete surveys accurately. This was addressed by translating questionnaires and using local-language interpreters. Moreover, gaining access to staff in government institutions often requires navigating bureaucratic hurdles. Securing official permission and working through designated contacts within the organization improved cooperation.

Suggestions for Further Study

Future research may consider the following directions:

1. A comparative study of manpower development outcomes between KADP and other state ADPs to examine regional variations and best practices.
2. An impact evaluation of digital training platforms in rural agricultural development settings, especially in post-pandemic contexts.

3. A gender-focused investigation to explore how manpower development affects male and female staff differently in agricultural agencies.

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