JIGAWA
Teacher Development Programme (TDP):
Teacher Supply and Demand Study

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This policy brief outlines the findings from the Teacher Supply and Demand study in Jigawa. The report was produced for the DFID-funded Teacher Development Programme (TDP) by Education Data, Research & Evaluation in Nigeria (EDOREN).

**Teacher Development Programme**

- **Primary School**
- **Junior Secondary School**
- **College of Education**

* Phase 1: Three states
* Phase 2: Three states

TDP was introduced in response to the recognition that children in Nigerian schools are not learning and that the quality of teaching, which is of central importance to the learning achievement, is a serious concern.

**Background to the study**

This study generated eight-year projections of the number of teachers required in primary and junior secondary schools (JSS) in Jigawa, and outlines the likely supply of teachers to the school system and suggestions for improving teacher recruitment and deployment.

The report seeks to support TDP's efforts to work with the state government and Colleges of Education to ensure that Jigawa has an adequate number of appropriately trained teachers in its basic education system.

**Study Methodology**

- **Qualitative Data Collection**: Directed at the Colleges of Education, and aimed to learn more about their student-teacher intake and the teacher graduation numbers for both for primary and JSS levels.  
  2. Focus on primary teachers, and hence, aimed at the State Universal Basic Education Board.  
  3. Focus on junior secondary school teachers, and was therefore directed to the Ministry of Education in Jigawa.

- **Qualitative Sampling**: We used purposive rather than representative sampling, with the aim of identifying the individuals responsible for the particular aspect assessed in each institution. This sampling was supplemented with a snowball sampling approach in the field, whereby key stakeholders whose relevance only became clear during the field work were added to the list of interviewees for the study.

- **Quantitative Data Collection**: The focus here was on obtaining additional administrative records or policy documentation that need collecting by relying on the data checklist. These checklists were split by the three target institutions: Colleges of Education, State Universal Basic Education Board (SUBEB) and the Ministry of Education (MoE).
The study utilised a mixed methods approach comprising qualitative instruments as well as a documentation checklist (used to meet the quantitative data requirements) to collect data in accordance with the research matrix.

**Projecting teacher demand**

To project teacher demand between 2015 and 2023, we used the Education Policy and Strategy Simulation (EPSSim) model, developed by UNESCO, to analyse and project resource needs under different scenarios. We used baseline data pertaining to the school-age population, pupil enrolment and the teacher stock to project future pupil and teacher stocks. We then used the model to project demand under three scenarios by defining core parameters under each different scenarios. The core parameters that need to be set for scenario development are the gross intake rate, promotion and repetition rates and Pupil Teacher Ratios (PTRs). These are as follows:

**Status quo scenario**

The key policy levers remain at their baseline levels and growth in teacher demand is driven entirely by growth in the size of the school-age population.

**Universal Basic Education scenario**

Based on the State Education Sector Strategic Plan (SESP) which aims to increase primary intake rates to 66% in primary schools, and meet the 40:1 PTR for Primary and 35:1 PTR for JSS by 2022.

**Meeting policy targets by 2022**

The national-level goals of universal enrolment in basic education and PTRs of 40:1 at primary level and 35:1 at JSS level are achieved at the end of the forecasting period. Enrolment rates and PTRs gradually adjust to these national-level targets over the course of the forecasting period.

**Study Objectives**

1. Estimate the size of current shortages of teachers at the primary and junior secondary levels (both qualified and unqualified), disaggregated by Local Government Association (LGA) and subject
2. Assess current policies and practices related to teacher recruitment, particularly the extent to which these are effective in ensuring that the best available candidates get recruited;
3. Identify potential pathways for improvements on each of these fronts
4. Prepare 8-year projections of teacher demand and future recruitment needs at the primary and junior secondary levels
5. Estimate the financial implications of these projections and the associated fiscal gap
6. Assess key aspects of teacher supply: how intake quotas are set; the scope for expanding the supply; the system for screening applicants to the CoEs; and the likely size of the reserve pool of teachers
7. Assess current policies and practices related to teacher deployment
Findings: Teacher Needs

In both cases, the PTR worsened. Despite strong enrolment growth, few teachers have been recruited in the past six years and it appears that Jigawa is struggling to replace teachers who retire. For both Primary and JSS, PTRs are considerably higher in rural than urban schools. Patterns of deployment also vary by gender, with very few female teachers in rural areas.

1. **Demand for teachers is set to rise rapidly over the next 10 years as the school-age population continues to grow**

If the state is to meet Universal Basic Education (UBE) goals (universal enrolment and PTRs of 40:1 at primary level and 35:1 at JSS) by 2025, the number of primary teachers would have to triple, while almost four times as many JSS teachers would be needed compared to 2016. This would require the recruitment of around 7,000 teachers per year (4,700 primary and 2,300 JSS), and increasing overall annual enrolment in the Colleges of Education (CoEs) to roughly 16,400 students by 2022.

2. **To finance the employment of additional teachers, SUBEB personnel spending on teachers would need to increase from N9 billion currently to N50 billion by 2025**

(increasing the budget more than five times across ten years). We project that roughly N13 billion would be available for personnel spending in 2025. This points to a fiscal gap of N37 billion. Training of such teachers would cost roughly N6.8 billion by 2025, which is more than three-and-a-half times the likely funds available for the colleges (N2 billion). This report thus finds that Jigawa faces considerable challenges to meet teacher demand. Large demographic pressures will result in significant enrolment increases. However, the state faces a grave fiscal crisis (linked to lower global oil prices) that prevents it from recruiting the necessary teachers to keep up with rising demand.
Recomendations: Teacher Needs

1. The SUBEB should conduct an annual teacher supply-demand analysis
   To better align teacher demand and supply, SUBEB should be responsible for a yearly assessment of overall teachers needed, and the likely number of teachers to be recruited in the near-future. These should be shared with the CoEs, and their NCE admissions should be aligned to this overall target.

2. The SUBEB should adopt a redeployment programme from urban to rural areas
   In line with the considerable disparities between urban and rural communities, additional incentives to rural teachers may be needed to induce resettlement.

3. The SUBEB should incorporate subject-specialisations in its recruitment drives
   Currently, there is a strong oversupply of teachers for certain subjects (e.g. Hausa, Arabic, social studies), while shortages exist for other subjects (e.g. English, Mathematics). The SUBEB should insist that any new teacher has a specialisation to fill a current teacher needs shortage.

4. The SUBEB should guide Colleges on graduate teacher numbers and subject specialisation
   The SUBEB should insist that College intake is based on their prospective graduate teacher needs and subject specialisations needed. This may require adopting a temporary NCE admissions ban for subjects with excessive NCE graduate numbers (e.g. Hausa, Arabic and Islamic Studies).

5. The Government of Jigawa should diversify its funding streams by collecting additional state tax revenue and reinvest these additional funds into the Education sector
   To address the demographic challenge in education, Jigawa should aim to raise more domestic resources, and earmark a large share of such additional funds for the education sector. A first step would be to try and identify lessons from the experiences of states like Kano that have relatively high internally-generated revenue.

Findings: Teacher Supply

1. The Colleges are under considerable pressure to increase their student intake
   based on unrealistically high estimates of their carrying capacity, financial incentives linked to student intake, and a number of initiatives by the Ministry of Education. This results in over-enrolment and the admission of weaker students who often do not comply with selection criteria; lower teaching quality; and a poor assessment system.
Student choices for NCE specialisations do not appear to align with overall teacher needs in Jigawa

CoEs have relatively little influence and incentive to steer students towards studying priority specialisations. As a result, there are large numbers of graduates for certain specialisations such as Arabic, Islamic studies and social sciences. Few NCE graduates exist for priority science subjects or for the new specialisations - Primary Education Studies (PES), Early Childhood Development Education (ECDE), Special Needs Education (SNE) and Adult and Non-Formal Education (ANFE).

A large share of teacher graduates, an estimated 53-64% have failed to find employment owing to limited teacher recruitment (In the last five years)

While recruitment is likely to remain low in the near future, Jigawa's teacher education system has not adjusted its intake rates to accommodate for this fact. Instead, a new College of Education (CILS Ringim) has opened, thus further expanding the future number of teacher graduates, with little chance of them being absorbed into the system.

To better align teacher demand and supply, there is a case for increasing recruitment and reducing CoE intake. This will likely be the only financially feasible manner to ensure NCE graduates have a fair chance of employment.

Recommendations: Teacher Supply

1. Reduce College enrolment to align with future teacher recruitment
   Given the large reserve pool of teachers and continued financial challenges in Jigawa, annual enrolment should be reduced to a maximum of 800 students for CoE Gumel and 400 students for CILS Ringim. Colleges should aim to have 45% of their intake on the new specialisations (PES, ECCE, SNE and ANFE). For the other 55%, the number of courses should be reduced to subjects with JSS teacher shortages (e.g. English, Mathematics and Chemistry). These numbers should become the new 'carrying capacity' and be enforced by JAMB/NCCE. The SUBEB should analyse and adjust these numbers annually in light of teacher recruitment prospects.

2. Compensate CoEs for the loss in revenue from reducing student enrolment
   Funding for the CoEs should be strictly contingent on student intake meeting the newly-set carrying capacity related to teacher recruitment prospects. To offset the revenue lost from student fees, the MoE should allocate an additional N44.8 million each year to CoE Gumel and N22 million to CILS Ringim.

3. Offer a Pre-University Course alongside the NCE
   Another reason why Colleges keep enrolment high is because they serve the double purpose of training teachers and being a preparatory course for university degrees. It may be advisable to separate out these tasks, by offering a specific Pre-University Course at the Colleges of Education.
Consolidate NCE Courses across the Colleges of Education
All Islamic and Arabic courses and specialisations should fall under the CILS Ringim, while Social Science and Natural Science courses should be under CoE Gumel. This may require shifting lecturers from one College to the other. Both Colleges would still offer the new NCE specialisations (PES, ECCE, ANFE and SNE). This should make it easier to reduce the intake for conventional (secondary school) NCE specialisations.

5
Popularise Primary Education Studies (PES) through targeted campaigns and recruitment
To improve the popularity of PES, a public campaign targeted at students and parents should highlight that this course has higher job prospects than other NCE specialisations. SUBEB’s recruitment should prioritise PES students by offering guaranteed interviews for recently graduated PES-student, thus increasing their likelihood of employment.

Findings: Teacher Recruitment and Deployment

1. while recruitment is officially structured around a state-based process of formal examinations and interviews, in practice, it is dominated by LGAs and influenced by pressures from local political elites
   This results in the recruitment of unqualified teachers. There is little space for head teachers to ensure appropriate matching of candidates to their school's needs.

2. when the state is responsible for recruitment and 'blindly' posts teachers to rural schools, this often leads to large levels of 'refusals'
   Moreover, it undermines the formal system, as teachers tend to use their informal networks to get moved to a different location. When local governments select their own candidates, retention tends to be higher, but this is often achieved by recruiting residents of the LGA who are unqualified to be teachers.

3. Jigawa has adopted a number of policy initiatives to attract and retain teachers
   the Teacher Inducement Allowance, the Teacher Volunteer Programme (a retraining programme for unqualified teachers) and the Female Teacher Development Skill Initiative. These provide a promising first step to improve recruitment and deployment.

Recommendations: Teacher Recruitment and Deployment

1. Formalise and empower the local government recruitment system
   Jigawa state should rationalise the (dominant) local government recruitment system so that it meets the minimum requirements set out by the state.
Reform the Teacher Inducement Allowance to incentivise rural postings

The Teacher Inducement Allowance is currently uniform across the State. It should be adjusted so that rural teachers receive a higher allowance. This should be done on the basis of a transparent rule (e.g. distance from the paved road), and should be sufficiently high (+30% of the base salary may be required). The TIA should increase for more rural postings (e.g. +40% to 50% extra as a posting is more rural). A clear ‘zoning’ map should be developed to clearly explain these rules to teachers. This should be financed by SUBEB at the state level, to avoid penalising rural LGAs.

Establish a database of all trained teachers, linked to SUBEB payroll

A teacher graduate database should give each student teacher a unique identifier that would provide a means for the SUBEB to reliably track teachers’ educational background in the future. This system should also include all currently employed teachers who are on sabbatical at a College to upgrade their qualifications, to monitor that they report to their duty station after completing their degree.

Raise the share of female teacher with a ‘prestigious’ recruitment scheme

Only around 12% of primary teachers and 8% of JSS teachers are female. To raise the share of female teachers, the focus should shift from training towards a designated ‘female recruitment and deployment programme’ that provides additional pay for high-quality female graduate teachers to teach in hard-to-staff rural schools. Adopting a female ‘quota’ in new recruitment and replacement processes could also help to increase the share of female teachers in Jigawa.

Concluding Remarks

Jigawa State Basic Education

Strong Demographic Pressures

Grave Fiscal Crisis
(linked to lower global oil prices)

Additional Sources of REVENUE

scale back enrolment into Colleges of Education
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