AN ASSESSMENT OF THE TRANSFER AND COMMERCIALIZATION OF RESEARCH AND DEVELOPMENT RESULTS FROM RESEARCH INSTITUTES IN SOUTHWESTERN NIGERIA

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ABSTRACT

The study assessed the extent of utilization of research and development (R&D) results in research institutes in southwestern Nigeria. It also examined the methods of transferring R&D results and the factors affecting the commercialization of R&D results. This was with a view to improving utilization of R&D results in Nigeria.

Primary data were collected from 9 research institutes and 79 entrepreneurs identified by research institutes as users of R&D results. Two separate sets of questionnaire were administered one for the research institutes and the other for the entrepreneurs. The sets of questionnaire were used to elicit information such as the level of R&D activities, methods of transferring R&D results to investors, and factors militating against the commercialization of research results. Secondary data obtained from available publications included the research reports and published articles of research institutes. The data obtained were analyzed using descriptive and inferential statistics, such as Analysis of Variance (ANOVA) and Duncan Multiple Range Test.

A total of 104 research results were generated, out of which 54.81% had been transferred to practicing and prospective investors. Out of the R&D results transferred, 56.14% were commercialized by the institutes themselves while 29.82% were commercialized by the investors. In addition, various methods of transfer used by the research institutes include seminar (3.13), workshop (3.63), trade fairs/exhibitions (3.13), technical assistance service (3.50) and feasibility studies (3.50), on a Likert scale of 1-4. There was significant difference in the effectiveness of the methods of transferring R & D results by the research institutes (F = 16.147, p \leq 0.05). However, seminar, trade fairs, technical assistance services, feasibility studies and workshops (3.13 - 3.63) had the same degree of effectiveness. The study further showed that the

major factors affecting commercialization of R&D results were lack of funds by investors (4.88), unsustainable government policy (4.50), lack of infrastructural facilities (3.88) and apathy to local R&D results adoption (3.63) on a Likert scale of 1-5. There was significance difference in the degree of severity of the factors affecting commercialization of R & D results (F = 6.704, $p \le 0.05$). Factors with high rating affecting commercialization of R & D results with the same significant were lack of funds and unsustainable government policy (4.50 - 4.88), while other factors with similar significance were lack of facilities for demonstration, lack of government and institutional support for SMEs and apathy to local R & D results adoption (3.00 - 3.50).

The study concluded that the utilization of R&D results by the research institutes and investors were low. Workshop was the most effective method of transferring R&D results, while the greatest limiting factor for R&D results commercialization was lack of fund by investors.