The acquisition of responsible environmental behaviour through the school curriculum has more often been inferred than researched. Literature search on the subject indicates that more studies have focused on the status of environmental education (EE) than on its outcome especially regarding impact on the learners. The relatively early stages of development that formal EE finds itself could explain why institutionalised evaluation systems have not yet emerged. However, given the acknowledged role that EE could play in the pursuance of sustainable development, an assessment of how well environmental educators have faired in preparing the youth as environmental stewards is crucial. Given this scenario, this study set out to evaluate the quality of EE taught in formal school curriculum in terms of its ability to develop responsible environmental behaviour among learners. The study specifically focused on the contribution of the school towards this responsibility while acknowledging the existence of a multiplicity of other selected non-school factors such as the neighbourhoods, gender and environmental information sources. An attempt was also made to gauge teachers' perceived preparedness to teach EE. The respondents were finalists of the first tier of education (standard eight pupils) from public schools in Kenya. The study design was *ex-post facto* while the approach was that of a comparative case study of urban and rural settings commonly found in Kenya. Three districts Kajiado for low potential rural agro-ecological zone, Kiambu for high potential rural agro-cological zone and Nairobi for urban zone represented these settings. A number of sampling techniques were used starting with stratified sampling to select the study sites, systematic random sampling to choose 45 schools and simple random sampling to pick the 450 respondents. Data were collected with the use of questionnaires, interview guides and checklists, which were reinforced, with photographic sceneries of selected environmental conditions existing in both rural and urban settings. The data were computer-analysed using the Statistical Package for the Social Sciences (SPSS). The major finding of the study was that the general school approach to EE that has assumed a linear relationship between knowledge, understanding and behaviour has not been successful in developing responsible behaviour on a sufficiently large scale. While there is no denial that some achievement has been made, the findings indicated that learners were inadequately prepared to translate the expressed high levels of environmental knowledge and sensitivity into responsible action at personal level. The results revealed many inconsistencies between what pupils believed they should do and what they actually did. Levels of participation in environmental conservation activities were found to be low. The learners attributed this to overloaded curriculum, feelings of helplessness, lack of environmental role models and the linking of environmental activities with punishment, among others. Although the school was rated highly as an environmental information source, the mass media was also found to play a significant role. In general, urban pupils were more involved in environmental activities than their rural counterparts and recorded higher levels of knowledge on environmental problems and their solutions. Gender did not have an influence on levels of participation but showed significant influence on environmental concerns. Majority of the teachers felt inadequately prepared and incompetent to teach EE which was compounded by lack of relevant instructional materials; limited understanding of the scope and content of what constitutes EE; lack of time and funds for field trips. At the policy level, mechanisms for reinforcing EE curriculum were found to be weak, while inconsistencies were noted between a school's day-to-day practice and its operational curriculum. From the findings, it is recommended that the EE curriculum should incorporate and provide opportunities for learners to acquire skills for translating awareness into action. Environmental activities should not be used as modes of punishment as these create a negative image about EE. Values and attitudes espoused in the school should be reflected in the
day-to-day behaviour of teachers and support staff as well as at the community level to model responsible behaviour. Environmental action learning should be core to a whole school's approach to EE and should be reinforced through care of the school grounds throughout learners' school life. The curriculum also needs to be reviewed to avoid duplication and release time for practical activities in EE. In-service training of teachers on methodologies of using school grounds and neighbourhoods in providing learners with hands-on experiences should be mounted, while the pre-service curriculum should be reviewed to put EE in its proper perspective. At the policy level, a mechanism to reinforce EE should be put in place, which can be achieved through school-to-school, child-to-child environmental inspections and organising annual environmental awards. In View of the above, further research is needed in a wider context of the geographical locations in Kenya. Other areas requiring further research include: methodologies of using the community as an effective tool for environmental action learning; enhancing the teaching of environmental matters through the school curriculum and how the mass media could effectively deliver EE in view of the study findings.