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IMPLEMENTATION OF DOMESTIC FUEL BURNING EMISSION REDUCTION PROJECT (BnM)

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Presentation Outline

- Purpose of the project and bigger picture
- Over view of domestic fuel burning (*challenges of rollout, why retention, how to overcome these challenges*)
- Current BnM activities and Benefits of the project
- Challenges and lessons learnt
- Way forward



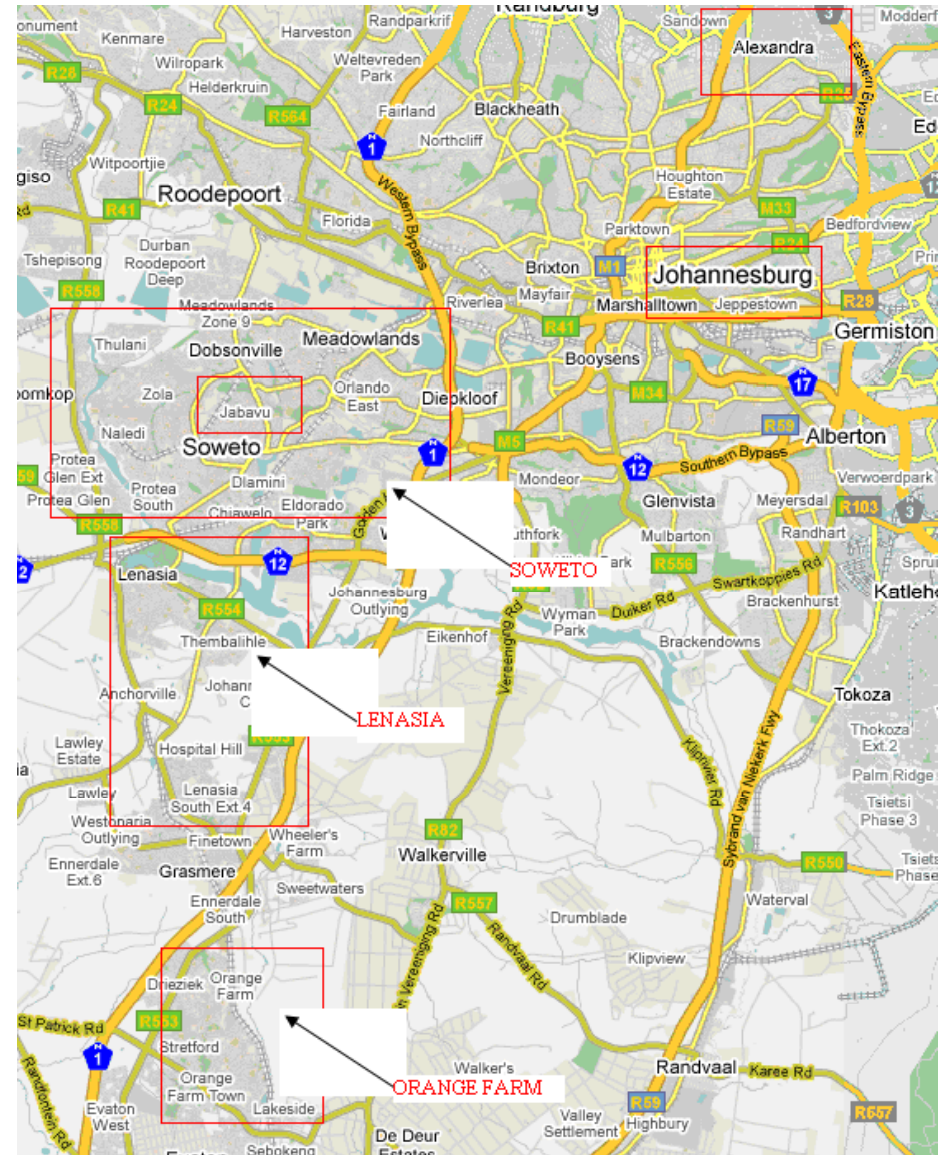
Purpose of the Project

- To uplift communities, but also reduce air pollution in the residential areas and raise awareness
- To introduce an alternative method of ignition for coal burning to mitigate against health and further environmental depression
- Create sustainable human settlements (Replacement of undesirable energy carriers with less polluting ones)
- Reducing the energy requirements of households.

Over view of domestic fuel burning



- 20 000 households in Alexandra
- 66 000 households in Soweto (about 33 000 in Jabavu and 30 000 in Protea South)

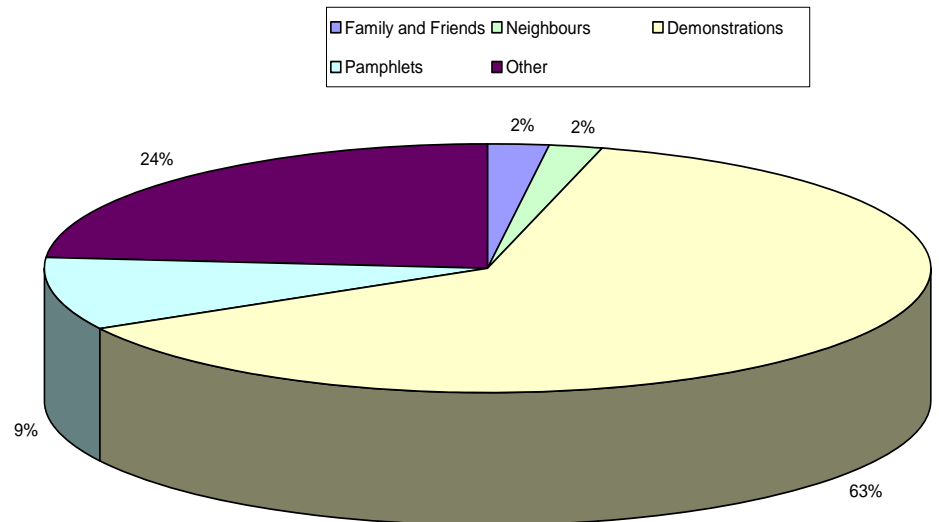
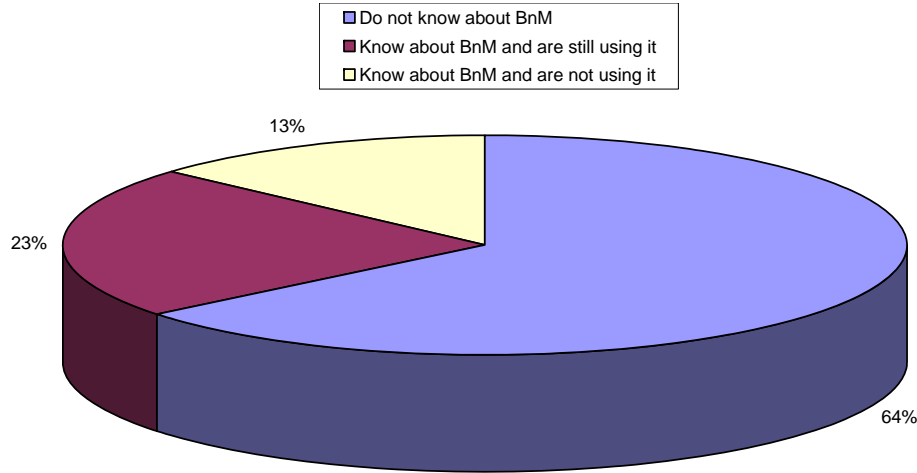




BnM activities and Benefits

- Retention survey or impact assessment study in Soweto (COJ)
- BnM rollout or demonstrations in Lenasia (Baseline emissions study)
- Clean fires campaign (DEAT)
- BnM rollouts in Alexandra (CEF/DME)

Retention Survey in Soweto (wards 19, 33, 35 & 37)



- Particulate reduction – the method can potentially reduce smoke by approximately 80%, with a conjecture that this could contribute (approximately 40-50%) reduction in ambient air pollution caused by the use of household coal in a relatively short period
- Financial benefits – the successful implementation of this initiative may contribute towards an estimated saving in health care costs, and the potential savings to households expenditure as a result of the decrease in the amount of coal used due.
- Other benefits – apart from smoke reduction and air quality improvement, it is a low to no-cost intervention. Households do not need to buy additional materials or appliances, or use additional energy sources. The new method can be used in either braziers or coal stoves, and does not threaten the position of the coal merchants as it does not attempt to substitute coal with another energy source.
- Environmental – Overview of pollution impacts from sources through baseline assessments, and the interventions thereof
- The BNM methodology serves as a way to make communities conscious of the danger of air pollution and the direct link between smoke inhalation and respiratory disease.

Challenges + lessons learnt

- Field workers training (lack thereof) and questionnaires
- Capacity to manage the project and Project costing
- The structural composition of households (e.g. more than one family in one dwelling)
- Minimizing competition among consultants (controlled and consolidated questionnaires)

Challenges + lessons learnt

Cont..



- Lack of focus groups to facilitate the up-keep of the methodology
- Strengthen relations with communities especially ward committees and NGOs (sustainability)
- Awareness campaigns (need improvement, e.g. smses, media etc)
- Alternative energy sources in a long term (e.g. solar cooker etc)

Way forward

- Bigger agenda (provision of sustainable livelihoods and provision of energy efficient services)
- Involvement of academic institutions (Research)
- Air quality regional coalitions – business (e.g. Bohlweki SSI), NGOs (e.g. LEGG), schools etc
- Media campaigns (e.g. DEAT Clean Fires)
- Development of emissions factors for domestic fuel(s)
- Correlation of health and particulates reduction using the BnM method (Epidemiological study)
- Committee to evaluate the impacts of BnM and recommend future approach



THANK YOU

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