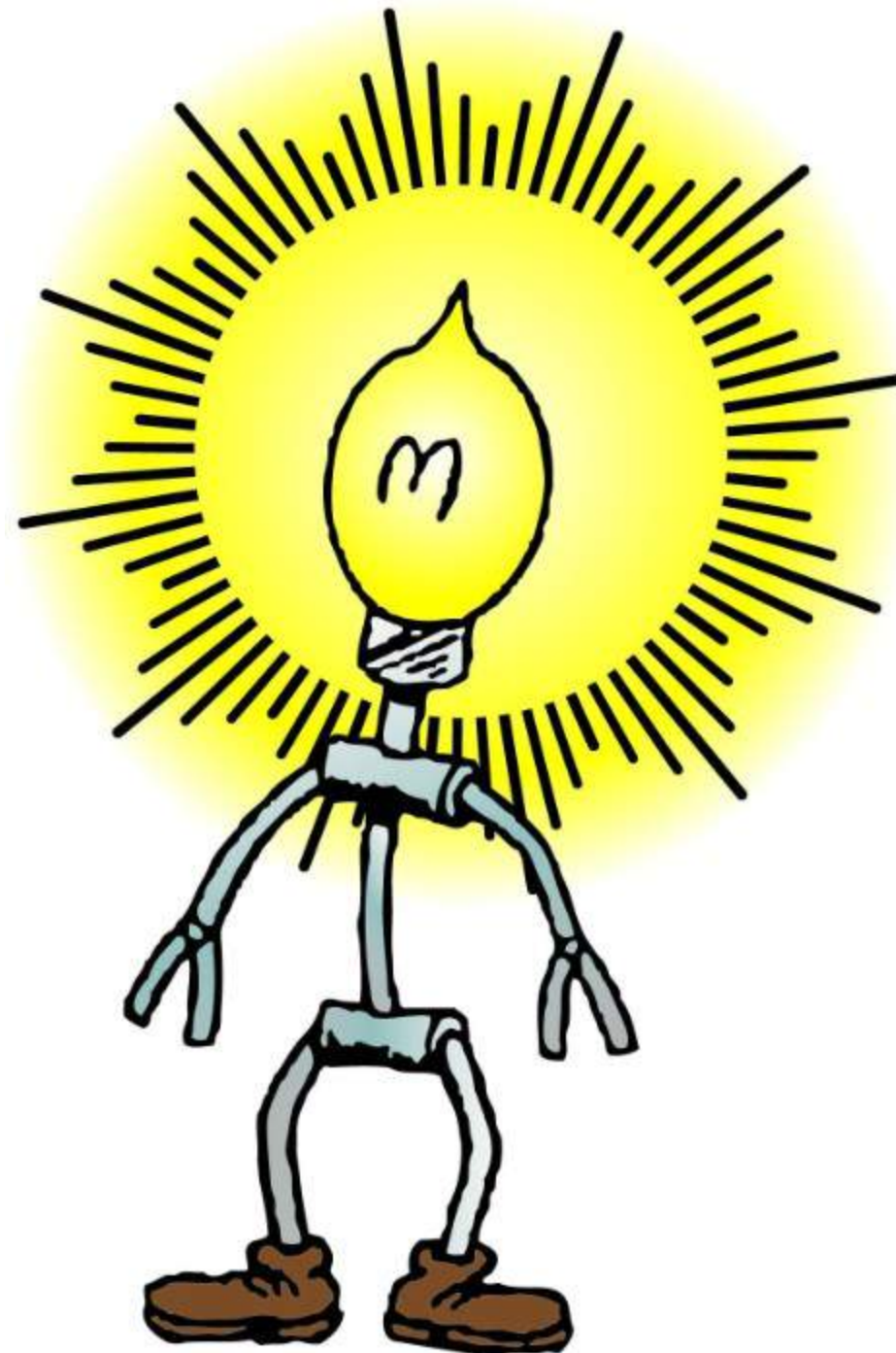


How to introduce more sustainable methods and materials without doing harm?







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Photo: Henk Meijerink



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| Chema « Design » | | Rezilta Viñerab (sou 18) « Vulnerability Score of 18 » | Sustainability / Viabilite | | | | | | | | Rezilta Total (sou 39) total Score of 39 » |
|----------------------|--|---|-------------------------------|--------------------------------|-----------------------------|----------------------------|----------------------------|--|---|--|---|
| Nimewo « number » | Deskripsyon « technique » | | Pep « people » | | | Planèt « planet » | | Profi « profit » | | Rezilta Viabilite (sou 21) « Sustainability Score of 21 » | |
| | | | Aseptans « acceptability » | Adaptasyon « adaptability » | Mentmans « maintenance » | Dirabilite durability » | Efe ekolojik eco-load » | Enkouraje mache lokal local market stimulate » | Enkouraje travay lokal local labour » | | |
| A | klisad avek bwa lokal « construction with local wood » | 12 | 3 | 1 | 1 | 2 | 1 | 2 | 2 | 12 | 24 |
| B | mi ak ròch « well of rocks » | 16 | 3 | 1 | 3 | 3 | 2 | 2 | 3 | 17 | 33 |
| C | planch palmis « planks made of palm tree » | 11 | 3 | 2 | 2 | 3 | 1 | 2 | 3 | 16 | 27 |
| D | blòk ak planch mango « concrete blocks and planks Mango » | 12 | 2 | 1 | 2 | 2 | 1 | 3 | 3 | 14 | 26 |
| E | blòk ak plywood « concrete blocks and plywood » | 12 | 2 | 1 | 2 | 2 | 3 | 3 | 3 | 16 | 28 |
| F | blòk ak tòl « concrete blocks and corrugated metal » | 12 | 1 | 1 | 2 | 2 | 3 | 3 | 2 | 14 | 26 |
| G | klisad ak bwa enfrange « construction with local wood, split wood » | 12 | 3 | 1 | 1 | 2 | 2 | 1 | 2 | 14 | 26 |
| H | tablo siman « sheets of fiber cementboard » | 16 | 2 | 1 | 3 | 3 | 3 | 1 | 1 | 14 | 30 |
| I | mi ki fèt ak debri « well of rubble » | 16 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 19 | 35 |
| J | randwi ak nas banbou « cement rendering with a mesh of bamboo » | 17 | 3 | 1 | 3 | 3 | 2 | 3 | 3 | 18 | 35 |
| K | randwi ak nas gabyon « cement rendering with metal chain-link » | 17 | 3 | 1 | 3 | 3 | 3 | 1 | 3 | 17 | 34 |



randwi ak nas gabyon | **K.**
< cement rendering with metal chain-link >

17 rezilta vilnerab sou
/18 < vulnerability score >

rezilta Viabilite sou **17**
/21 < sustainability score >

< Cost per house >

\$472,-

< Construction time per house >

5 Days

< Labour Costs >

\$46,-

< Material Costs >

\$343,-

< Logistic Costs >

\$83,-



how
sustainable
was it?

Is this a
succesfull
technique?



Great new ideas
and materials are
often not adapted.
Why?

What is the role of
the product and
what is the role of
the people?





- Does this fit the context of Sint Maarten?
- What would Marie think of this?
- What would it do to the market?
- Would this do harm?
- Can and will local builders use this?



When is the right
time for innovation?

What process / principles should
be considered to introduce such a
more sustainable material?





Summarizing



Ideas with potential, not (yet) matching the market



Innovations that have not been adopted



Innovations that have been adopted



How to introduce more sustainable methods and materials without doing harm?



- Great new ideas and materials are often not adapted. Why?
- What process / principles should be considered to successfully introduce more sustainable construction materials and methods?
- What is the role of the product and what is the role of the people?
- Can we have standards for this, including 'do no harm' limits?
 - How do we measure and compare the relative sustainability of materials?
- When is the right time for innovation?

