Community reproductive health programmes aim to reduce population pressure through access to family planning and improve general human health status. Few programmes currently link reproductive health with environmental status but population pressure can be a key driver in environmental degradation. The goal of Population, Health and Environment integration is to link conservation with health and family planning activities in order to increase the effectiveness and sustainability of conservation activities, compared to their implementation through separate sector programmes.

**Current strategies** in the context of reproductive health and coral reefs have focused on:
- Easing population pressure by expanding knowledge and access to family planning services.
- Coupled strategies that link population health initiatives with alternative livelihood development and environmental management.
- Empowering women, through e.g. the development of alternative livelihoods to reduce the practice of ‘fish-for-sex’, where women engage in sexual activity in return for fish, which is seen as an important factor in the spread of HIV/AIDS in some coastal areas.

**Assumptions:** As with education, conservation efforts can both contribute towards and benefit from improved health. Healthy, more engaged populations are more likely to be effective custodians of their natural resources. It is also assumed that healthier populations are more able to adapt to change and engage in conservation strategies.

### Ecological impacts

**Positive**
It has been documented that:
- Increased birth control in coastal communities leads to a decrease in population pressure. With less fishing activity and human induced environmental degradation it is assumed that ecosystems can flourish.

**Negative**
It has been suggested that:
- Contraceptives entering the ecosystem via sanitation systems may be problematic for both marine and human health.

### Social impacts

**Positive**
Documented examples have shown that increased use of contraceptives can:
- Through reduced pregnancy rates decrease population pressure, decreasing resource requirements for both households (food, shelter, etc.) and communities.
- Prevent the spread of HIV/AIDS and other sexually transmitted diseases.
- Increased decision-making power on when to become pregnant empowers women to engage in educational, economic and natural resource management activities.

**Negative**
It has been suggested that:
- The increased use of contraceptives has the potential to conflict with cultural and religious beliefs about contraception usage.

### Implications for ecological resilience

- Decrease in population pressure due to lower birth rates, which will lead to:
  - Reduced pressure on fish stocks.
  - Improved water quality.
  - Increased biodiversity through decreased environmental degradation and fishing activity.

### Implications for social resilience

- Provides women and families with the capacity to family plan.
- Empowers women at the local level.
- Decreases rates of sexually transmitted diseases.

**Spatial scale:** Local  
**Temporal scale:** Medium to long-term.
Case study: Blue Ventures population health environment approach

In direct response to the unmet family planning and health needs of Madagascar’s semi-nomadic Vezo fishing communities, Blue Ventures have developed a population health environment programme which upholds the local women’s reproductive rights to choose freely the number and spacing of their births. This initiative is known locally as Safidy, meaning “the freedom to choose”. Through this initiative, Blue Ventures works in close collaboration with health partners including USAID Mikolo and Mahefa Miaraka, to train and support local women to offer community-based family planning and other basic health services within the Madagascar Ministry of Public Health’s national health system.

Has it been successful? Through this initiative, the proportion of women using contraceptives in Velondriake increased from 10% in 2007 to 50% in 2016. The fertility rate has also dropped by 40% since 2007. After linking family planning and family size with marine environmental resource management and food security, men became more engaged in reproductive health issues. A community survey conducted in 2013 indicated that 82% think that using family planning will help them to better provide for their families.

Challenges facing the project include the lack of adequate state-provided care (e.g. availability of midwives); resource limitations and poor transportation links between communities creating difficulties for the Blue Ventures midwife to reach villages and offer assistance during birth; and travelling medicine sellers who do not have medical or pharmacological training who also provide contraceptives but without offering appropriate advice.

Future application: The health angle has helped Blue Ventures find entry points and opportunities for engaging with communities and they are now rolling out this approach in other locations including Indonesia and Mozambique. The same model may not be appropriate in all cultures/religious settings, however, and must be appropriately designed.

Further reading


