Small-scale fishing and aquaculture play a significant role in many communities through the supply of food, job creation and generation of income, thus ensuring food security and poverty alleviation. The subject of food security in small-scale fishing or small-scale farming communities has been studied and it is widely accepted that small-scale fishers are generally poor. Literature acknowledges that small-scale fishers are not homogenous, and the extent food insecurity vary between small-scale fishing communities and households. In order to address for insecurity, the South African government is in a process of allocating small-scale fishing rights to coastal fishing communities that were excluded from fishing activities. In a similar way, a blue growth initiative, Operation Phakisa, was launched to develop community-based aquaculture. The State-funded aquaculture projects are ongoing to develop aquaculture enterprises, create jobs and economic development in rural communities. At the core of both small-scale fishing and aquaculture are efforts to improve food security and create sustainable livelihoods. Communities often employ a mix of livelihood strategies to ensure that there is some food security, and the role and significance of the applied strategies differ, and in some places remain unknown. This study seeks to establish the role and extent of small-scale fishing and aquaculture on food security at a small town of Doringbaai with strong fishing tradition. The study will be conducted using a case study design, which will be conducted at Doringbaai in the Western Cape Province of South Africa. The research approach will be made up of pilot site visits of field observations, focus group interviews and key informants interviews. The results of this research will be discussed to reflect the role of both aquaculture and small-scale fishing and the extent in alleviation of food insecurity.