

TABULATED GEOHAZARD SUSCEPTIBILITY ASSESSMENT OF THE BARANGAY CENTERS WITHIN THE MUNICIPALITY OF SIRAWA, ZAMBOANGA DEL NORTE

BRGY	MUNICIPALITY/ CITY	LONGITUDE	LATITUDE	LANDSLIDE SUSCEPTIBILITY RATING	FLOOD SUSCEPTIBILITY RATING	LANDSLIDE REMARKS/RECOMMENDATIONS	FLOOD REMARKS/RECOMMENDATIONS	AS OF	ASSESSED BY/DATA SOURCE
Balatakan	SIRAWAI	122.1143056	7.5916944	Moderate	High	Observe for presence of mass movement; constant communication and updates with Brgy. Lagundi on landslide related hazard situation; activate Barangay Disaster Coordinating Council (BDCC).	Coastal Hazard such as storm surge; coastal flooding, coastal erosion, and tsunami Constant updating of the weather condition thru PAGASA; Develop an early warning device/system intended for coastal related hazard prevention; identify evacuation site; Activate BDCC	2010	MGB-RO
Balonkan	SIRAWAI	122.1106667	7.5144361	None	High		Flashflood and sheet flood along Piacan River Constant updating of the weather condition thru PAGASA; Monitor and observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for flashflood/sheetflood related hazard	2010	MGB-RO

Balubuan	SIRAWAI	122.1265833	7.6030278	None	Low	High (steep slope; road cuts) Monitor/observe for presence of vertical displacement and cracks perpendicular to the steep slopes; Observed for saturated ground or seeps in areas that are not typically wet; constant communication and updates with Brgy. Pina on landslide related hazard situation; Activate Barangay Disaster Coordinating Council (BDCC); Inform the concern agencies on the condition of the landslide along steep road cuts of the national road.	Flashflood and sheet flood along creeks draining toward the area. Constant updating of the weather condition thru PAGASA; Monitor and observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for flashflood/sheetflood related hazard prevention; Identify evacuation site; Activate BDCC.	2010	MGB-RO
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Bitugan	SIRAWAI	122.1429694	7.5648056	None	High	High (steep slopes; road cut) Monitor/observe for presence of vertical displacement and cracks perpendicular to the steep slopes; Observed for saturated ground or seeps in areas that are not typically wet; constant communication and updates with Brgy. Sirawai Proper (Pob.) on landslide related hazard situation; Activate Barangay Disaster Coordinating Council (BDCC); Inform the concern agencies on the condition of the landslide along steep road cuts of the coastal road.	Coastal Hazard such as storm surge; coastal flooding, and tsunamis. Flashflood and sheet flood along creeks draining toward the area. Constant updating of the weather condition thru PAGASA; Observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for coastal, flashflood, and sheet flood related hazard prevention; Identify evacuation site; activate Barangay Disaster Coordinating Council (BDCC);	2010	MGB-RO
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Bongon	SIRAWAI	122.1054167	7.5316944	None	High	High (steep slopes; road cuts) Monitor/observe for presence of vertical displacement and cracks perpendicular to the steep slopes; Observed for saturated ground or seeps in areas that are not typically wet; constant communication and updates with Brgy. Piacan on landslide related hazard situation; Activate Barangay Disaster Coordinating Council (BDCC); Inform the concern agencies on the condition of the landslide along steep road cuts of the national road.	Coastal hazards such as storm surge; coastal flooding, and tsunami. Constant updating of the weather condition thru PAGASA; Develop an early warning device/system intended for coastal related hazard prevention; identify evacuation site; Activate BDCC	2010	MGB-RO
Catuyan	SIRAWAI	122.1896389	7.5866111	None	High	High (steep slopes; valley side) Monitor/observe for presence of vertical displacement and cracks perpendicular to the steep slopes; Observed for saturated ground or seeps in areas that are not typically wet; constant communication and updates with Brgy. Pulang Lupa on landslide related hazard situation; Activate Barangay Disaster Coordinating Council (BDCC);	Flashflood and sheet flood along Sirawai River Constant updating of the weather condition thru PAGASA; Monitor and observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for flashflood/sheetflood related hazard prevention; Identify evacuation site; Activate BDCC.	2010	MGB-RO

Culasian	SIRAWAI	122.1502500	7.5341111	None	High	Moderate (steeply sloping hill north of the barangay center) Observe for presence of mass movement; constant communication and updates with Brgy. Motong on landslide related hazard situation; activate Barangay Disaster Coordinating Council (BDCC).	Flashflood and sheet flood along Piacan River Constant updating of the weather condition thru PAGASA; Monitor and observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for flashflood/sheetflood related hazard prevention; Identify evacuation site; Activate BDCC.	2010	MGB-RO
Danganon	SIRAWAI	122.0786944	7.5240833	None	High	Moderate (slope facing the barangay) Observe for presence of vertical displacement and cracks perpendicular to the steep slopes; constant communication and updates with Brgy. Balonkan on landslide related hazard situation;	Coastal hazards such as storm surge; coastal flooding, coastal erosion, and tsunami Constant updating of the weather condition thru PAGASA; Develop an early warning device/system intended for coastal related hazard prevention; identify evacuation site; Activate BDCC	2010	MGB-RO

Doña Cecilia	SIRAWAI	122.1641111	7.5866111	None	High	High (steep slopes; valley side) Monitor/observe for presence of vertical displacement and cracks perpendicular to the steep slopes; Observed for saturated ground or seeps in areas that are not typically wet; constant communication and updates with Brgy. San Vicente on landslide related hazard situation; Activate Barangay Disaster Coordinating Council (BDCC);	Flashflood and sheet flood along Sirawai River Constant updating of the weather condition thru PAGASA; Monitor and observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for flashflood/sheetflood related hazard prevention; Identify evacuation site; Activate BDCC;	2010	MGB-RO
Guban	SIRAWAI	122.2709444	7.5625278	Moderate	None	High (steep slopes; valley side) Monitor/observe for presence of vertical displacement and cracks perpendicular to the steep slopes; Observed for saturated ground or seeps in areas that are not typically wet; constant communication and updates with Brgy. Catuyan on landslide related hazard situation; Activate Barangay Disaster Coordinating Council (BDCC);		2010	MGB-RO

Lagundi	SIRAWAI	122.1165833	7.5916944	Moderate	High	Observe for presence of mass movement; constant communication and updates with Brgy. Balatakan on landslide related hazard situation; activate Barangay Disaster Coordinating Council (BDCC).	Coastal Hazard such as storm surge; coastal flooding and tsunami Constant updating of the weather condition thru PAGASA; Develop an early warning device/system intended for coastal related hazard prevention; identify evacuation site; Activate BDCC	2010	MGB-RO
Libucon	SIRAWAI	122.1814444	7.5790000	None	High	Moderate (ridge west of the barangay) Observe for presence of mass movement; constant communication and updates with Brgy. Dona Cecilia on landslide related hazard situation; activate Barangay Disaster Coordinating Council (BDCC).	Flashflood and sheet flood along major tributary of Sirawai River. Constant updating of the weather condition thru PAGASA; Monitor and observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for flashflood/sheetflood related hazard prevention; Identify evacuation site; Activate BDCC.	2010	MGB-RO

Lubok	SIRAWAI	122.1299722	7.5190556	None	High	High (steep slopes) Monitor and observe for presence of vertical displacement , presence of spring, and cracks perpendicular to the steep slopes; develop an early warning device/system intended for landslide related hazard prevention/mitigation Observed for saturated ground or seeps in areas that are not typically wet; constant communication and updates with Brgy. Balonkan on landslide related hazard situation;	Flashflood and sheet flood along Piacan River Constant updating of the weather condition thru PAGASA; Observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for flashflood related hazard prevention; Identify evacuation site; activate Barangay Disaster Coordinating Council (BDCC);	2010	MGB-RO
Macuyon	SIRAWAI	122.1252500	7.5910278	None (coastal plain) Moderate (steep slopes)	High	Observe for presence of mass movement; constant communication and updates with Brgy. Pina on landslide related hazard situation; activate Barangay Disaster Coordinating Council (BDCC).	Coastal hazards such as storm surge; coastal flooding and tsunami Constant updating of the weather condition thru PAGASA; Develop an early warning device/system intended for coastal related hazard prevention; identify evacuation site; Activate BDCC	2010	MGB-RO

Minanga	SIRAWAI	122.0961667	7.5199722	High	High	<p>Possible zone of landslide accumulation coming from the steep slope of the ridge near the site.</p> <p>Observe for presence of vertical displacement and cracks perpendicular to the steep slopes; Observed for saturated ground or seeps in areas that are not typically wet; develop an early warning device/system intended for landslide-related hazard prevention/mitigation; constant communication and updates with Brgy. Piacan on landslide related hazard situation; Identify evacuation site; Activate Barangay Disaster Coordinating Council (BDCC);</p>	<p>Flashflood and sheet flood along Piacan River</p> <p>Coastal hazards such as storm surge; coastal flooding, and tsunami</p> <p>Constant updating of the weather condition thru PAGASA; Observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for flashflood/sheet flood and coastal related hazard prevention; Identify evacuation site; activate Barangay Disaster Coordinating Council (BDCC);</p>	2010	MGB-RO
Motong	SIRAWAI	122.2709444	7.5297778	High (foot of the slope near the barangay center) None (flood plain near Piacan River)	High	<p>Monitor/observe for presence of vertical displacement and cracks perpendicular to the steep slopes; Observed for saturated ground or seeps in areas that are not typically wet; constant communication and updates with Brgy. Luboc on landslide related hazard situation; Activate Barangay Disaster Coordinating Council (BDCC);</p>	<p>Flashflood and sheet flood along Piacan River</p> <p>Constant updating of the weather condition thru PAGASA; Monitor and observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for flashflood/sheetflood related hazard prevention; Identify evacuation site;</p>	2010	MGB-RO

Napulan	SIRAWAI	122.1084167	7.5101389	Moderate	Low	None (Rice field) (Possible zone of landslide accumulation coming from the steep slope of the Hill (Peak 88) near the site. Observe for presence of vertical displacement and cracks perpendicular to the steep slopes; constant communication and updates with Brgy. Balonkan on landslide related hazard situation;	High (near Piacan River) Flashflood and sheet flood along Piacan River Constant updating of the weather condition thru PAGASA; Monitor and observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for flashflood/sheetflood related hazard prevention; Identify evacuation site; Activate BDCC.	2010	MGB-RO
Panabutan	SIRAWAI	122.1613889	7.6021389	None	High	High (steep slopes; valley side) Monitor/observe for presence of vertical displacement and cracks perpendicular to the steep slopes; Observed for saturated ground or seeps in areas that are not typically wet; Activate Barangay Disaster Coordinating Council (BDCC);	Flashflood and sheet flood along Panabutan River Constant updating of the weather condition thru PAGASA; Monitor and observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for flashflood/sheetflood related hazard prevention; Identify evacuation site; Activate BDCC.	2010	MGB-RO

Piakan	SIRAWAI	122.1034167	7.5270556	None	High	High (steep slopes) Monitor and observe for presence of vertical displacement , presence of spring, and cracks perpendicular to the steep slopes; develop an early warning device/system intended for landslide related hazard prevention/mitigation Observed for saturated ground or seeps in areas that are not typically wet; constant communication and updates with Brgy. Balonkan on landslide related hazard situation;	Flashflood and sheet flood along Piakan River. Coastal Hazard such as storm surge; coastal flooding and tsunami. Constant updating of the weather condition thru PAGASA; Observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for flashflood/sheet flood related hazard prevention; Identify evacuation site; activate Barangay Disaster Coordinating Council (BDCC);	2010	MGB-RO
Piña	SIRAWAI	122.1291667	7.5938611	None	High	Moderate (steep slopes near the barangay center) Observe for presence of mass movement; constant communication and updates with Brgy. Macuyon on landslide related hazard situation; activate Barangay Disaster Coordinating Council (BDCC).	Coastal Hazard such as storm surge; coastal flooding and tsunami. Constant updating of the weather condition thru PAGASA; Develop an early warning device/system intended for coastal related hazard prevention; identify evacuation site; Activate BDCC	2010	MGB-RO
Pisa Puti	SIRAWAI	122.1654444	7.5833611	None	High	High (Valley side; steep slopes) Monitor/observe for presence of vertical displacement and cracks perpendicular to the steep slopes; Observed for saturated	Flashflood and sheet flood along Sirawai River. Constant updating of the weather condition thru PAGASA; Monitor and observe for rapid increase/decrease in creek/river water levels,	2010	MGB-RO

Pisa Itom	SIRAWAI	122.1654444	7.5641944	Moderate to High (barangay center; steep slopes)	None	Monitor/observe for presence of vertical displacement and cracks perpendicular to the steep slopes; Observed for saturated ground or seeps in areas that are not typically wet; Identify evacuation site; constant communication and updates with Brgy. Bitugan on landslide related hazard situation; Activate Barangay Disaster Coordinating Council (BDCC);		2010	MGB-RO
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Saint Mary (Pob.)	SIRAWAI	122.1386667	7.5877222	None	High		<p>Coastal Hazard such as storm surge; coastal flooding, and tsunami.</p> <p>Flashflood and sheet flood along Panabutan and Sirawai Rivers.</p> <p>Constant updating of the weather condition thru PAGASA; Observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for coastal, flashflood, and sheet flood related hazard prevention; Identify evacuation site; activate Barangay Disaster Coordinating Council (BDCC);</p> <p>Floor line of the houses should be more than 1.5 meters high to reduce the impact of flooding to the settlers; properly engineered foundation is necessary for high rise building since the area is</p>	2010	MGB-RO
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San Nicolas (Pob.)	SIRAWAI	122.1380833	7.5891944	None	High		<p>Coastal Hazard such as storm surge; coastal flooding, and tsunami.</p> <p>Flashflood and sheet flood along Panabutan and Sirawai Rivers.</p> <p>Constant updating of the weather condition thru PAGASA; Observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for coastal, flashflood, and sheet flood related hazard prevention; Identify evacuation site; activate Barangay Disaster Coordinating Council (BDCC);</p> <p>Floor line of the houses should be more than 1.5 meters high to reduce the impact of flooding to the settlers; properly engineered foundation is necessary for high rise building since the</p>	2010	MGB-RO
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San Vicente (Pob.)	SIRAWAI	122.1477010	7.5809280	None	High		Flashflood and sheet flood along Panabutan, and Sirawai Rivers. Constant updating of the weather condition thru PAGASA; Monitor and observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for flashflood/sheet flood related hazard prevention; Identify evacuation site; Activate BDCC; Floor line of the houses should be more than 1.5 meters high to reduce the impact of flooding to the settlers; properly engineered foundation is necessary for high rise building since the area is underlain by unstable and soft sediments.	2010	MGB-RO
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Pugos	SIRAWAI	122.1112444	7.5430194	None	High	High (Road cuts; steep slopes) Monitor/observe for presence of vertical displacement and cracks perpendicular to the steep slopes; Observed for saturated ground or seeps in areas that are not typically wet; constant communication and updates with Brgy. Talabiga on landslide related hazard situation; Activate Barangay Disaster Coordinating Council (BDCC); Inform the concern agencies on the condition of the landslide along steep road cuts of the coastal road.	Coastal Hazard such as storm surge; coastal flooding, coastal erosion, and tsunami. Flashflood and sheet flood along creek. Constant updating of the weather condition thru PAGASA; Observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for coastal, flashflood, and sheet flood related hazard prevention; Identify evacuation site; activate Barangay Disaster Coordinating Council (BDCC);	2010	MGB-RO
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Pula Bato	SIRAWAI	122.4542222	7.5267778	None	High	High (steep slope; road cuts) Monitor/observe for presence of vertical displacement and cracks perpendicular to the steep slopes; Observed for saturated ground or seeps in areas that are not typically wet; constant communication and updates with Brgy. Piacan on landslide related hazard situation; Activate Barangay Disaster Coordinating Council (BDCC); Inform the concern agencies on the condition of the landslide along steep road cuts of the coastal road.	Flashflood and sheet flood along Piacan River Constant updating of the weather condition thru PAGASA; Monitor and observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for flashflood/sheetflood related hazard prevention; Identify evacuation site; Activate BDCC.	2010	MGB-RO
Pulang Lupa	SIRAWAI	122.1838611	7.5875278	None	High	High (steep slopes; valley side) Monitor/observe for presence of vertical displacement and cracks perpendicular to the steep slopes; Observed for saturated ground or seeps in areas that are not typically wet; constant communication and updates with Brgy. Dona Cecilia on landslide related hazard situation; Activate Barangay Disaster Coordinating Council (BDCC);	Flashflood and sheet flood along Sirawai River Constant updating of the weather condition thru PAGASA; Monitor and observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for flashflood/sheetflood related hazard prevention; Identify evacuation site; Activate BDCC.	2010	MGB-RO

San Roque (Pob.)	SIRAWAI	122.1377222	7.5866944	None	High		<p>Coastal Hazard such as storm surge; coastal flooding, and tsunami.</p> <p>Flashflood and sheet flood along Panabutan and Sirawai Rivers.</p> <p>Constant updating of the weather condition thru PAGASA; Observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for coastal, flashflood, and sheet flood related hazard prevention; Identify evacuation site; activate Barangay Disaster Coordinating Council (BDCC);</p> <p>Floor line of the houses should be more than 1.5 meters high to reduce the impact of flooding to the settlers; properly engineered foundation is</p>	2010	MGB-RO
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Sipakit	SIRAWAI	122.1771111	7.6110556	None	High	High (steep slopes; valley side) Monitor/observe for presence of vertical displacement and cracks perpendicular to the steep slopes; Observed for saturated ground or seeps in areas that are not typically wet; Activate Barangay Disaster Coordinating Council (BDCC);	Flashflood and sheet flood along Panabutan River.; Constant updating of the weather condition thru PAGASA; Monitor and observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for flashflood/sheetflood related hazard prevention; Identify evacuation site; Activate BDCC.	2010	MGB-RO
Sipawa	SIRAWAI	122.2123889	7.5028056	Moderate	None	High (steep slopes; valley side) ; Monitor/observe for presence of vertical displacement and cracks perpendicular to the steep slopes along valley side; Observed for saturated ground or seeps in areas that are not typically wet; constant communication and updates with Brgy. Culasian on landslide related hazard situation; Activate Barangay Disaster Coordinating Council (BDCC);		2010	MGB-RO

Sirawai Proper (Pob.)	SIRAWAI	122.1396667	7.5858611	None	High		<p>Coastal Hazard such as storm surge; coastal flooding, and tsunami.</p> <p>Flashflood and sheet flood along Panabutan and Sirawai Rivers.</p> <p>Constant updating of the weather condition thru PAGASA; Observe for rapid increase/decrease in creek/river water levels, possibly accompanied by increased turbidity (soil content); develop an early warning device/system intended for coastal, flashflood, and sheet flood related hazard prevention; Identify evacuation site; activate Barangay Disaster Coordinating Council (BDCC);</p> <p>Floor line of the houses should be more than 1.5 meters high to reduce the impact of flooding to the settlers; properly engineered foundation is</p>	2010	MGB-RO
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Talabiga	SIRAWAI	122.1138417	7.5490222	High	High	<p>None (Coastal plain) Possible zone of landslide accumulation coming from the steep slope of the ridge near the site. Observe for presence of vertical displacement and cracks perpendicular to the steep slopes; Observed for saturated ground or seeps in areas that are not typically wet; develop an early warning device/system intended for landslide-related hazard prevention/mitigation; constant communication and updates with Brgy. Tapanayan on landslide related hazard situation; Activate Barangay Disaster Coordinating Council (BDCC); Inform the concern agencies on the condition of the landslide along steep road cuts of the coastal road.</p>	<p>Coastal Hazard such as storm surge; coastal flooding and tsunami Constant updating of the weather condition thru PAGASA; Develop an early warning device/system intended for coastal related hazard prevention; identify evacuation site; Activate BDCC</p>	2010	MGB-RO
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Tapayan	SIRAWAI	122.1263028	7.5548861	None	High	High (road cuts; steep slopes) Monitor/observe for presence of vertical displacement and cracks perpendicular to the steep slopes; Observed for saturated ground or seeps in areas that are not typically wet; constant communication and updates with Brgy. Bitugan on landslide related hazard situation; Activate Barangay Disaster Coordinating Council (BDCC); Inform the concern agencies on the condition of the landslide along steep road cuts of the coastal road.	Coastal Hazard such as storm surge; coastal flooding and tsunami Constant updating of the weather condition thru PAGASA; Develop an early warning device/system intended for coastal related hazard prevention; identify evacuation site; Activate BDCC	2010	MGB-RO
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